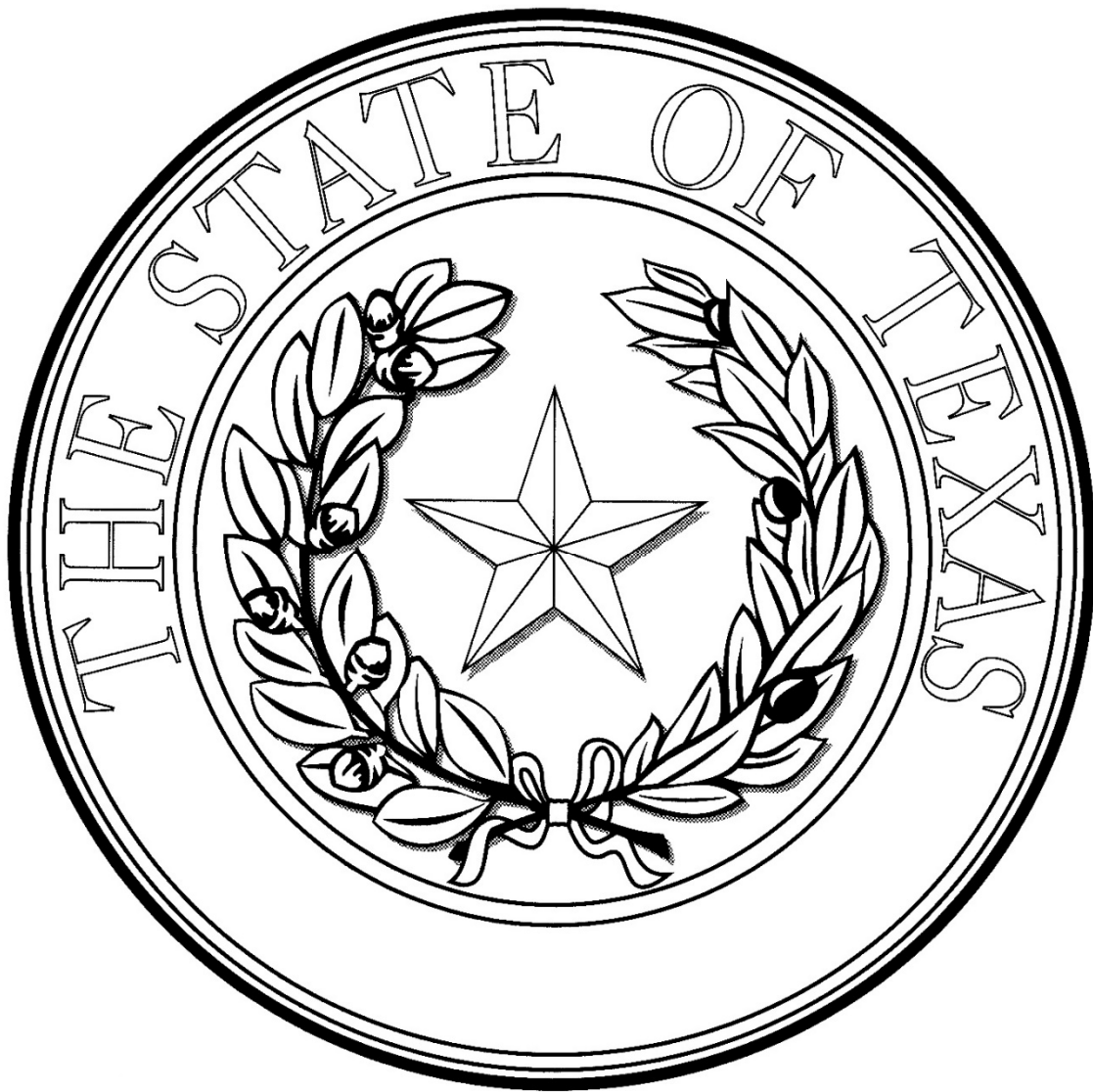

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IN THIS ISSUE

GOVERNOR

Appointments.....	6609
Proclamation 41-3861.....	6609
Proclamation 41-3862.....	6610

ATTORNEY GENERAL

Requests for Opinions.....	6611
Opinions.....	6611

EMERGENCY RULES

HEALTH AND HUMAN SERVICES COMMISSION

COVID-19 EMERGENCY HEALTH CARE FACILITY LICENSING

26 TAC §500.20.....	6613
---------------------	------

LICENSING STANDARDS FOR PRESCRIBED PEDIATRIC EXTENDED CARE CENTERS

26 TAC §550.213.....	6614
----------------------	------

NURSING FACILITY REQUIREMENTS FOR LICENSURE AND MEDICAID CERTIFICATION

26 TAC §554.2802.....	6615
-----------------------	------

26 TAC §554.2803.....	6616
-----------------------	------

LICENSING STANDARDS FOR HOME AND COMMUNITY SUPPORT SERVICES AGENCIES

26 TAC §558.960.....	6616
----------------------	------

DAY ACTIVITY AND HEALTH SERVICES REQUIREMENTS

26 TAC §559.65.....	6617
---------------------	------

PROPOSED RULES

TEXAS HEALTH AND HUMAN SERVICES COMMISSION

MEDICAID MANAGED CARE

1 TAC §353.1305.....	6621
----------------------	------

REIMBURSEMENT RATES

1 TAC §355.8200.....	6624
----------------------	------

TEXAS ALCOHOLIC BEVERAGE COMMISSION

LICENSING

16 TAC §§33.1, 33.5.....	6627
--------------------------	------

16 TAC §§33.72, 33.78, 33.80.....	6629
-----------------------------------	------

LICENSING

16 TAC §33.52.....	6630
--------------------	------

ENFORCEMENT

16 TAC §§35.1 - 35.3, 35.5, 35.6.....	6631
---------------------------------------	------

AUDITING

16 TAC §§41.1 - 41.3.....	6632
---------------------------	------

16 TAC §§41.11, 41.18, 41.19.....	6633
-----------------------------------	------

16 TAC §§41.20 - 41.23, 41.25, 41.27, 41.28, 41.30 - 41.32, 41.35, 41.38, 41.39, 41.41 - 41.46, 41.49, 41.51 - 41.57.....	6633
---	------

16 TAC §41.61.....	6633
--------------------	------

16 TAC §41.71.....	6634
--------------------	------

AUDITING

16 TAC §§41.1 - 41.6.....	6637
---------------------------	------

16 TAC §§41.11 - 41.26.....	6638
-----------------------------	------

16 TAC §§41.30 - 41.40.....	6641
-----------------------------	------

16 TAC §§41.41 - 41.43.....	6645
-----------------------------	------

16 TAC §§41.50 - 41.56.....	6645
-----------------------------	------

16 TAC §41.60.....	6648
--------------------	------

TEXAS DEPARTMENT OF LICENSING AND REGULATION

COMBATIVE SPORTS

16 TAC §§61.10, 61.20, 61.23, 61.40, 61.41, 61.43, 61.47, 61.80.....	6649
--	------

BARBERS

16 TAC §82.80.....	6652
--------------------	------

COSMETOLOGISTS

16 TAC §83.80.....	6653
--------------------	------

TEXAS EDUCATION AGENCY

COMMISSIONER'S RULES CONCERNING OPTIONS FOR LOCAL REVENUE LEVELS IN EXCESS OF ENTITLEMENT

19 TAC §62.1001, §62.1072.....	6655
--------------------------------	------

CURRICULUM REQUIREMENTS

19 TAC §74.2001.....	6657
----------------------	------

PLANNING AND ACCOUNTABILITY

19 TAC §§97.1055, 97.1057, 97.1059, 97.1072, 97.1073.....	6658
---	------

EDUCATIONAL PROGRAMS

19 TAC §102.1601.....	6667
-----------------------	------

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR SCIENCE

19 TAC §§112.1 - 112.7.....	6671
-----------------------------	------

19 TAC §§112.25 - 112.28.....	6685
-------------------------------	------

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR CAREER DEVELOPMENT

19 TAC §§127.316, 127.319 - 127.321, 127.324 - 127.326.....	6693
---	------

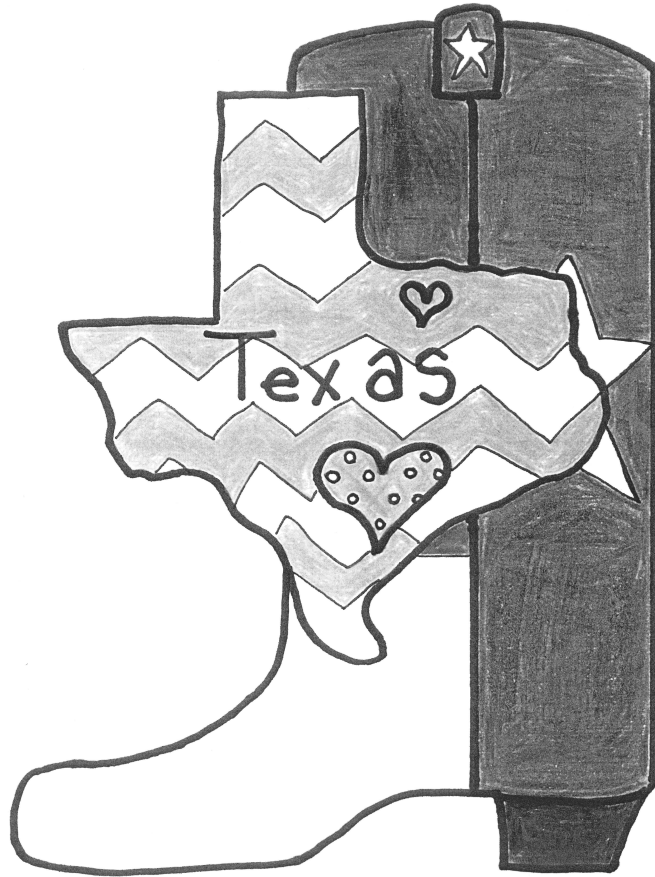
19 TAC §§127.416 - 127.433.....	6705
---------------------------------	------

19 TAC §127.482.....	6734
----------------------	------

19 TAC §127.651, §127.652.....	6737
--------------------------------	------

19 TAC §§127.778 - 127.782, 127.785 - 127.791	6741	30 TAC §308.21	6891
DEPARTMENT OF STATE HEALTH SERVICES		30 TAC §308.31	6891
END STAGE RENAL DISEASE FACILITIES		30 TAC §308.41	6892
25 TAC §117.49	6766	30 TAC §308.71	6892
HOSPITAL LICENSING		30 TAC §308.81	6892
25 TAC §133.45	6767	30 TAC §308.91	6893
AMBULATORY SURGICAL CENTERS		30 TAC §308.101	6893
25 TAC §135.30	6771	30 TAC §308.141	6893
BIRTHING CENTERS		TOXIC POLLUTANT EFFLUENT STANDARDS	
25 TAC §137.55	6772	30 TAC §314.1	6894
ABORTION FACILITY REPORTING AND LICENSING		PRETREATMENT REGULATIONS FOR EXISTING AND NEW SOURCES OF POLLUTION	
25 TAC §139.60	6774	30 TAC §315.1	6896
HEALTH PROFESSIONS REGULATION		CONTROL OF CERTAIN ACTIVITIES BY RULE	
25 TAC §140.435	6776	30 TAC §§321.71 - 321.81	6901
FOOD AND DRUG		30 TAC §§321.91 - 321.97	6901
25 TAC §229.144	6777	30 TAC §§321.211 - 321.220	6901
RADIATION CONTROL		REGIONALIZATION	
25 TAC §§289.252, 289.256, 289.257	6779	30 TAC §§351.41 - 351.45	6902
STANDARD OF CARE		ADOPTED RULES	
25 TAC §448.401	6876	TEXAS ANIMAL HEALTH COMMISSION	
25 TAC §448.801, §448.803	6877	CHRONIC WASTING DISEASE	
25 TAC §448.911	6878	4 TAC §§40.1 - 40.8	6905
STANDARD OF CARE		TEXAS EDUCATION AGENCY	
25 TAC §448.912	6879	SCHOOL DISTRICTS	
HEALTH AND HUMAN SERVICES COMMISSION		19 TAC §61.1033	6920
SPECIAL CARE FACILITIES		19 TAC §61.1036, §61.1040	6920
26 TAC §506.38	6880	TEACHER RETIREMENT SYSTEM OF TEXAS	
FREESTANDING EMERGENCY MEDICAL CARE FACILITIES		EMPLOYMENT AFTER RETIREMENT	
26 TAC §509.68	6882	34 TAC §§31.1 - 31.3	6939
PRIVATE PSYCHIATRIC HOSPITALS AND CRISIS STABILIZATION UNITS		34 TAC §§31.11 - 31.15	6939
26 TAC §510.44	6883	34 TAC §§31.1 - 31.37, 31.41	6939
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY		EMPLOYMENT AFTER RETIREMENT	
CONSOLIDATED PERMITS		34 TAC §§31.1 - 31.6	6942
30 TAC §§305.542 - 305.544	6885	34 TAC §§31.11 - 31.19	6942
CRITERIA AND STANDARDS FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM		34 TAC §§31.31 - 31.33	6942
30 TAC §308.1	6891	HEALTH CARE AND INSURANCE PROGRAMS	
		34 TAC §41.4	6943
		34 TAC §41.16	6944
		34 TAC §§41.30, 41.34, 41.36, 41.37, 41.45	6944

34 TAC §41.35.....	6945	Notice of District Petition	6981
CONTESTED CASES		Notice of District Petition	6982
34 TAC §43.1, §43.45.....	6945	Notice of Hearing MARBAC, L.L.C. SOAH Docket No. 582-21-2735 TCEQ Docket No. 2021-0438-MWD Permit No. WQ0015880001.....	6983
TEXAS BOND REVIEW BOARD		Notice of Hearing on Denton County Municipal Utility District No. 10: SOAH Docket No. 582-21-2602; TCEQ Docket No. 2020-1310-MWD; Permit No. WQ0015803001.....	6984
BOND REVIEW BOARD		Notice of Hearing Port Arthur LNG, LLC SOAH Docket No. 582-22-0201 TCEQ Docket No. 2021-0942-AIR Proposed Permit Nos. 158420, PSDTX1572, and GHGPSDTX198.....	6985
34 TAC §§181.1 - 181.3, 181.5, 181.10	6946	Notice of Opportunity to Comment on Default Orders of Administrative Enforcement Actions	6986
ALLOCATION OF STATE'S LIMIT ON CERTAIN PRIVATE ACTIVITY BONDS		Notice of Public Hearing on Assessment of Administrative Penalties and Requiring Certain Actions of Jeval Ventures, Inc. dba Maaco Collision Repair & Auto Painting SOAH Docket No. 582-22-0131 TCEQ Docket No. 2019-1607-AIR-E	6987
34 TAC §§190.1 - 190.8	6948	Notice of Public Hearing on Proposed Revisions to 30 TAC Chapters 305, 308, 314, and 315.....	6987
RULE REVIEW		Notice of Public Hearing on Proposed Revisions to 30 TAC Chapters 321 and 351.....	6988
Proposed Rule Reviews			
Texas Education Agency.....	6953	General Land Office	
Texas Department of Public Safety.....	6953	Notice and Opportunity to Comment on Requests for Consistency Agreement/Concurrence Under the Texas Coastal Management Program	6989
TABLES AND GRAPHICS		Department of State Health Services	
.....	6955	Order Placing Five Synthetic Cannabinoids, N-Ethylpentylone, and 4F-MDMB-BUTINACA into Schedule I, and Placing Lasmiditan in Schedule V.....	6990
IN ADDITION		Texas Department of Insurance	
Comptroller of Public Accounts		Company Licensing	6998
Certification of the Average Closing Price of Gas and Oil - August 2021	6971	Public Utility Commission of Texas	
Local Sales Tax Rate Changes Effective October 1, 2021	6971	Notice of Application to Adjust High Cost Support Under 16 TAC §26.407(h).....	6998
Office of Consumer Credit Commissioner		Rio Grande Council of Governments	
Notice of Rate Ceilings.....	6977	Request for Qualifications for Professional Engineering Services for Region E Water Planning Group.....	6998
Texas Commission on Environmental Quality		Supreme Court of Texas	
Agreed Orders.....	6977	Preliminary Approval of Amendments to Canon 6(B) of the Code of Judicial Conduct.....	6998
Amended Notice of Application and Application and Public Hearing for an Air Quality Standard Permit for a Concrete Batch Plant with Enhanced Controls Proposed Air Quality Registration Number 166215	6979		
Enforcement Order.....	6980		
Notice of Application and Public Hearing for an Air Quality Standard Permit for a Concrete Batch Plant with Enhanced Controls Proposed Air Quality Registration Number 166475.....	6980		
Notice of Availability and Request for Public Comment Within 30 Days. Proposed Draft Natural Resource Damage Assessment Plan; Intercontinental Terminals Company, LLC 2019 Deer Park Tank Fire, Harris County, Texas	6981		
Notice of Correction to Agreed Order Number 6	6981		



THE GOVERNOR

As required by Government Code, §2002.011(4), the *Texas Register* publishes executive orders issued by the Governor of Texas. Appointments and proclamations are also published. Appointments are published in chronological order. Additional information on documents submitted for publication by the Governor's Office can be obtained by calling (512) 463-1828.

Appointments

Appointments for September 20, 2021

Appointed to the Commission on State Emergency Communications, for a term to expire September 1, 2027, Larry L. "Chip" VanSteenberg of Conroe, Texas (Mr. VanSteenberg is being reappointed).

Appointed to the Commission on State Emergency Communications, for a term to expire September 1, 2027, Von C. Washington of El Paso, Texas (Mr. Washington is being reappointed).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, Ada L. Booth, M.D. of Corpus Christi, Texas (replacing Jeffrey L. Luna, M.D. of Livingston, whose term expired).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, Michael E. Cokinos of Houston, Texas (Mr. Cokinos is being reappointed).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, Kandace B. Farmer, D.O. of Southlake, Texas (Dr. Farmer is being reappointed).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, LuAnn R. Morgan of Midland, Texas (Ms. Morgan is being reappointed).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, Jayaram B. "Jay" Naidu, M.D. of Odessa, Texas (Dr. Naidu is being reappointed).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, Ebony V. Todd of Fort Hood, Texas (replacing Linda G. Molina of San Antonio, whose term expired).

Appointed to the Texas Medical Board, for a term to expire April 13, 2027, Sherif Zaafran, M.D. of Houston, Texas (Dr. Zaafran is being reappointed).

Appointments for September 28, 2021

Appointed pursuant to SB 3, 87th Legislature, Regular Session, to the Texas Energy Reliability Council, for a term to expire at the pleasure of the Governor, Bradley C. "Brad" Jones of Liberty Hill, Texas.

Appointed pursuant to SB 3, 87th Legislature, Regular Session, to the Texas Energy Reliability Council, for a term to expire at the pleasure of the Governor, Nathan P. "Nate" Murphy of San Antonio, Texas.

Appointed pursuant to SB 3, 87th Legislature, Regular Session, to the Texas Energy Reliability Council, for a term to expire at the pleasure of the Governor, George W. Presses of San Antonio, Texas.

Appointed pursuant to SB 3, 87th Legislature, Regular Session, to the Texas Energy Reliability Council, for a term to expire at the pleasure of the Governor, Edward J. Stones of Houston, Texas.

Appointed pursuant to SB 3, 87th Legislature, Regular Session, to the Texas Energy Reliability Council, for a term to expire at the pleasure of the Governor, Jonathan J. "Jon" Taylor of Austin, Texas.

Appointed pursuant to SB 3, 87th Legislature, Regular Session, to the Texas Energy Reliability Council, for a term to expire at the pleasure of the Governor, Melissa A. Trevino of Houston, Texas.

Greg Abbott, Governor

TRD-202103850



Proclamation 41-3861

TO ALL TO WHOM THESE PRESENTS SHALL COME:

WHEREAS, I, Greg Abbott, Governor of Texas, issued a disaster proclamation on March 13, 2020, certifying under Section 418.014 of the Texas Government Code that the novel coronavirus (COVID-19) poses an imminent threat of disaster for all counties in the State of Texas; and

WHEREAS, in each subsequent month effective through today, I have issued proclamations renewing the disaster declaration for all Texas counties; and

WHEREAS, I have issued executive orders and suspensions of Texas laws in response to COVID-19, aimed at protecting the health and safety of Texans and ensuring an effective response to this disaster; and

WHEREAS, a state of disaster continues to exist in all counties due to COVID-19;

NOW, THEREFORE, in accordance with the authority vested in me by Section 418.014 of the Texas Government Code, I do hereby renew the disaster proclamation for all counties in Texas.

Pursuant to Section 418.017, I authorize the use of all available resources of state government and of political subdivisions that are reasonably necessary to cope with this disaster.

Pursuant to Section 418.016, any regulatory statute prescribing the procedures for conduct of state business or any order or rule of a state agency that would in any way prevent, hinder, or delay necessary action in coping with this disaster shall be suspended upon written approval of the Office of the Governor. However, to the extent that the enforcement of any state statute or administrative rule regarding contracting or procurement would impede any state agency's emergency response that is necessary to cope with this declared disaster, I hereby suspend such statutes and rules for the duration of this declared disaster for that limited purpose.

In accordance with the statutory requirements, copies of this proclamation shall be filed with the applicable authorities.

IN TESTIMONY WHEREOF, I have hereunto signed my name and have officially caused the Seal of State to be affixed at my office in the City of Austin, Texas, this the 28th day of September, 2021.

Greg Abbott, Governor

TRD-202103852

◆ ◆ ◆
Proclamation 41-3862

TO ALL TO WHOM THESE PRESENTS SHALL COME:

WHEREAS, I, Greg Abbott, Governor of Texas, issued a disaster proclamation on May 31, 2021, certifying under Section 418.014 of the Texas Government Code that the surge of individuals unlawfully crossing the Texas-Mexico border posed an ongoing and imminent threat of disaster for a number of Texas counties and for all state agencies affected by this disaster; and

WHEREAS, I amended the aforementioned proclamation on June 25, 2021, including to modify the list of affected counties and therefore declare a state of disaster for Brewster, Brooks, Crockett, Culberson, DeWitt, Dimmit, Edwards, Frio, Goliad, Gonzales, Hudspeth, Jeff Davis, Jim Hogg, Kimble, Kinney, La Salle, Lavaca, Live Oak, Maverick, McMullen, Midland, Pecos, Presidio, Real, Terrell, Uvalde, Val Verde, and Zapata counties, and for all state agencies affected by this disaster; and

WHEREAS, on June 30, 2021, I renewed that disaster proclamation, as amended, and also declared a state of disaster for Colorado, Crane, Galveston, Kenedy, Mason, Medina, and Throckmorton counties based on the same certified conditions; and

WHEREAS, on July 15, 2021, I amended the proclamation issued on June 30, 2021, to modify the list of affected counties to also declare a state of disaster for Bee, Jackson, Schleicher, Sutton, Webb, and Zavala counties based on the same certified conditions; and

WHEREAS, on July 30, 2021, I renewed the disaster proclamation, as amended and renewed, and also declared a state of disaster for Menard County based on the same certified conditions; and

WHEREAS, on August 29, 2021, I renewed the disaster proclamation, as amended and renewed, and also declared a state of disaster for Wharton County based on the same certified conditions; and

WHEREAS, the certified conditions continue to exist and pose an ongoing and imminent threat of disaster as set forth in the prior proclamations; and

WHEREAS, communications with county officials have confirmed that the certified conditions now also pose an ongoing and imminent threat of disaster in McCulloch, Refugio, Victoria, and Wilbarger counties;

NOW, THEREFORE, in accordance with the authority vested in me by Section 418.014 of the Texas Government Code, I do hereby declare a state of disaster for McCulloch, Refugio, Victoria, and Wilbarger counties, and I do hereby renew the disaster proclamation, as amended and renewed, for Bee, Brewster, Brooks, Colorado, Crane, Crockett, Culberson, DeWitt, Dimmit, Edwards, Frio, Galveston, Goliad, Gonzales, Hudspeth, Jackson, Jeff Davis, Jim Hogg, Kenedy, Kimble, Kinney, La Salle, Lavaca, Live Oak, Mason, Maverick, McMullen, Medina, Menard, Midland, Pecos, Presidio, Real, Schleicher, Sutton, Terrell, Throckmorton, Uvalde, Val Verde, Webb, Wharton, Zapata, and Zavala counties, and for all state agencies affected by this disaster. All orders, directions, suspensions, and authorizations provided in the Proclamation of May 31, 2021, as amended and renewed on June 25, June 30, July 15, July 30, and August 29, 2021, are in full force and effect.

In accordance with the statutory requirements, copies of this proclamation shall be filed with the applicable authorities.

IN TESTIMONY WHEREOF, I have hereunto signed my name and have officially caused the Seal of State to be affixed at my office in the City of Austin, Texas, this the 28th day of September, 2021.

Greg Abbott, Governor

TRD-202103855
◆ ◆ ◆

THE ATTORNEY GENERAL

The *Texas Register* publishes summaries of the following: Requests for Opinions, Opinions, and Open Records Decisions.

An index to the full text of these documents is available on the Attorney General's website at <https://www.texas.attorneygeneral.gov/attorney-general-opinions>. For information about pending requests for opinions, telephone (512) 463-2110.

An Attorney General Opinion is a written interpretation of existing law. The Attorney General writes opinions as part of his responsibility to act as legal counsel for the State of Texas. Opinions are written only at the request of certain state officials. The Texas Government Code indicates to whom the Attorney General may provide a legal opinion. He may not write legal opinions for private individuals or for any officials other than those specified by statute. (Listing of authorized requestors: <https://www.texasattorneygeneral.gov/attorney-general-opinions>.)

Requests for Opinions

RQ-0433-KP

Requestor:

The Honorable Jenny P. Dorsey

Nueces County Attorney

901 Leopard Street, Room 207

Corpus Christi, Texas 78401-3689

Re: Whether the doctrine of incompatibility or conflict-of-interest laws prevent simultaneous service as a county commissioner and general manager of a water authority (RQ-0433-KP)

Briefs requested by October 25, 2021

For further information, please access the website at www.texasattorneygeneral.gov or call the Opinion Committee at (512) 463-2110.

TRD-202103846

Austin Kinghorn

General Counsel

Office of the Attorney General

Filed: September 28, 2021



Opinions

Opinion No. KP-0386

The Honorable Dee Hobbs

Williamson County Attorney

405 M.L.K. Street #7

Georgetown, Texas 78626

Re: Whether Executive Order GA-38 creates a right, privilege, power, or immunity with regard to Texans' ability to not wear a face covering (RQ-0429-KP)

S U M M A R Y

Executive Order GA-38 generally prohibits a governmental entity, including a county, city, school district, or public health authority, from requiring any person to wear a face covering or to mandate that another person wear a face covering.

Section 39.03 of the Penal Code makes it an offense for a "public servant acting under color of his office or employment" to intentionally deny or impede "another in the exercise or enjoyment of any right, privilege, power, or immunity, knowing his conduct is unlawful."

Executive Order GA-38 creates immunity for Texans to be free from enforcement of most local governmental mandates that require face coverings. A court could find under certain facts that a governmental official intentionally denying that immunity to an individual by enforcing an unlawful face covering mandate is in violation of section 39.03 of the Penal Code.

For further information, please access the website at www.texasattorneygeneral.gov or call the Opinion Committee at (512) 463-2110.

TRD-202103845

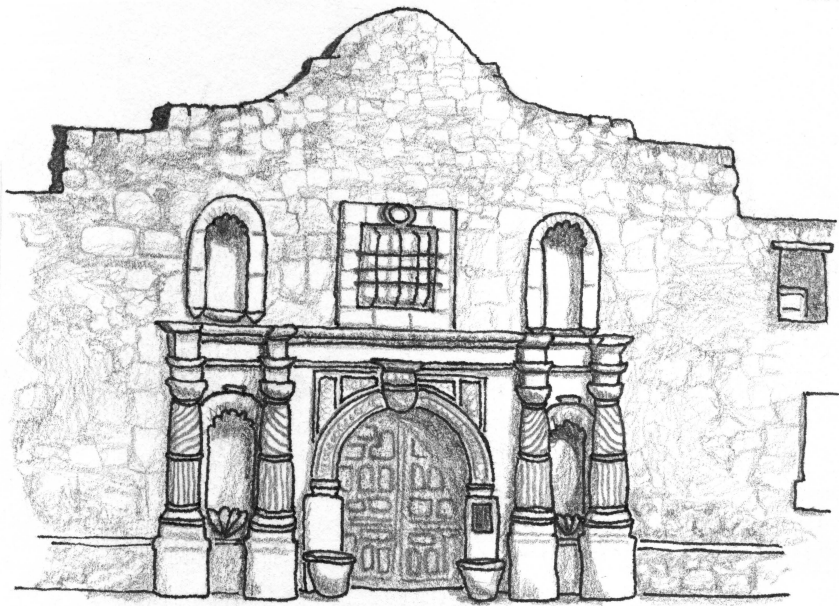
Austin Kinghorn

General Counsel

Office of the Attorney General

Filed: September 28, 2021





EMERGENCY RULES

Emergency Rules include new rules, amendments to existing rules, and the repeals of existing rules. A state agency may adopt an emergency rule without prior notice or hearing if the agency finds that an imminent peril to the public health, safety, or welfare, or a requirement of state or federal law, requires adoption of a rule on fewer than 30 days' notice. An emergency rule may be effective for not longer than 120 days and may be renewed once for not longer than 60 days (Government Code, §2001.034).

TITLE 26. HEALTH AND HUMAN SERVICES

PART 1. HEALTH AND HUMAN SERVICES COMMISSION

CHAPTER 500. COVID-19 EMERGENCY

HEALTH CARE FACILITY LICENSING SUBCHAPTER B. END STAGE RENAL DISEASE FACILITIES

26 TAC §500.20

The Executive Commissioner of the Health and Human Services Commission (HHSC) adopts on an emergency basis in Title 26 Texas Administrative Code, Chapter 500 COVID-19 Emergency Health Care Facility Licensing, new §500.20, ESRD Off-Site Facilities During the COVID-19 Pandemic, concerning an emergency rule in response to COVID-19 in order to reduce the risk of transmission of COVID-19. This emergency rule will allow end stage renal disease (ESRD) facilities to treat and train dialysis patients more effectively during the COVID-19 pandemic. As authorized by Texas Government Code §2001.034, HHSC may adopt an emergency rule without prior notice or hearing upon finding that an imminent peril to the public health, safety, or welfare requires adoption on fewer than 30 days' notice. Emergency rules adopted under Texas Government Code §2001.034 may be effective for not longer than 120 days and may be renewed for not longer than 60 days.

BACKGROUND AND PURPOSE

The purpose of the emergency rulemaking is to support the Governor's March 13, 2020, proclamation certifying that the COVID-19 virus poses an imminent threat of disaster in the state and declaring a state of disaster for all counties in Texas. In this proclamation, the Governor authorized the use of all available resources of state government and of political subdivisions that are reasonably necessary to cope with this disaster and directed that government entities and businesses would continue providing essential services. HHSC accordingly finds that an imminent peril to the public health, safety, and welfare of the state exists and requires immediate adoption of this emergency rule for ESRD Off-Site Facilities During the COVID-19 Pandemic.

To protect current and future patients in health care facilities and the public health, safety, and welfare of the state during the COVID-19 pandemic, HHSC is adopting an emergency rule to allow a currently licensed ESRD facility to apply to operate an off-site outpatient facility without obtaining a new license at: (1) an ESRD facility that is no longer licensed that closed within the past 36 months; (2) a mobile, transportable, or relocatable medical unit; (3) a physician's office; or (4) an ambulatory surgical center or freestanding emergency medical care facility that is no longer licensed that closed within the past 36 months.

STATUTORY AUTHORITY

The emergency rule is adopted under Texas Government Code §2001.034 and §531.0055 and Texas Health and Safety Code §251.003 and §251.014. Texas Government Code §2001.034 authorizes the adoption of emergency rules without prior notice and hearing, if an agency finds that an imminent peril to the public health, safety, or welfare requires adoption of a rule on fewer than 30 days' notice. Texas Government Code §531.0055 authorizes the Executive Commissioner of the Health and Human Services Commission to adopt rules and policies necessary for the operation and provision of health and human services by the health and human services system. Texas Health and Safety Code §251.003 requires HHSC to adopt rules for the issuance, renewal, denial, suspension, and revocation of a license to operate an ESRD facility. Texas Health and Safety Code §251.014 requires these rules to include minimum standards to protect the health and safety of a patient of an ESRD facility.

This new section implements Texas Government Code §531.0055 and Texas Health and Safety Code Chapter 251.

§500.20. ESRD Off-Site Facilities During the COVID-19 Pandemic.

(a) Based on Governor Greg Abbott's March 13, 2020, declaration of a state of disaster in all Texas counties, the Texas Health and Human Services Commission (HHSC) adopts this emergency rule to establish continuing requirements and flexibilities to protect public health and safety during the COVID-19 pandemic. The requirements and flexibilities established in this section are applicable during an active declaration of a state of disaster in all Texas counties due to the COVID-19 pandemic, declared pursuant to §418.014 of the Texas Government Code.

(b) An end stage renal disease (ESRD) facility, licensed under Texas Health and Safety Code Chapter 251, that meets the requirements of this emergency rule may use an off-site facility under its current license for added services or an increased number of stations to meet patient needs in response to COVID-19 for the duration this emergency rule is in effect or any extension of this emergency rule is in effect.

(c) The off-site facility must be:

(1) an ESRD facility no longer licensed under Texas Health and Safety Code Chapter 251 that closed within the past 36 months, or a facility with a pending application for such a license that has passed its final architectural review inspection, which:

(A) shall be capable of meeting the current licensing requirements in the Texas Administrative Code (TAC) Title 25 §117.32(a) - (e) (relating to Water Treatment, Dialysate Concentrates, and Reuse); or

(B) shall provide integrated hemodialysis machines, which incorporate water treatment and dialysis preparation and delivery into one system.

(2) a mobile, transportable, or relocatable medical unit utilizing integrated dialysis systems and defined as any trailer or self-propelled unit:

- (A) equipped with a chassis on wheels;
- (B) without a permanent foundation; and
- (C) intended for provision of medical services on a temporary basis.

(3) a physician's office built after January 1, 2015, that is currently in use, which shall be used only for home training of COVID-19-negative dialysis patients.

(4) a physician's office built after January 1, 2015, that has closed within the past 12 months, which shall be used only for home training of COVID-19-negative dialysis patients and complies with the following:

- (A) the office shall be well maintained with all building systems in good working condition; and
- (B) manual fire extinguishers shall be provided in accordance with NFPA 10: Standard for Portable Fire Extinguishers.

(5) an ambulatory surgical center no longer licensed under Texas Health and Safety Code, Chapter 243 that closed within the past 36 months and will be used for either home training or providing in-center dialysis treatment where both of the following are met:

- (A) the ESRD facility shall only provide integrated hemodialysis machines; and
- (B) the building layout shall provide a direct view of all patient stations from a nurse's station.

(6) a freestanding emergency medical care facility no longer licensed under Texas Health and Safety Code, Chapter 254 that closed within the past 36 months and will be used for either for home training services or providing in-center dialysis treatment where both of the following are met:

- (A) the ESRD facility shall only provide integrated hemodialysis machines; and
- (B) the building layout shall provide a direct view of all patient stations from a nurse's station.

(d) Prior to receiving approval to use an off-site facility under this emergency rule, the ESRD facility must submit to INFO-HFLC@hhs.texas.gov on a form provided by HHSC:

- (1) an application to use an off-site facility for the addition of services or increased number of stations; and
- (2) water culture testing results that meet the requirements of 25 TAC §117.32(c)(4).

(e) HHSC has the discretion to approve or deny any application to use an off-site facility under this emergency rule. HHSC may require an inspection of the off-site facility or additional documentation prior to considering an application.

(f) In order to protect the health, safety, and welfare of patients and the public, HHSC may withdraw its approval for an ESRD facility to use the off-site facility under this emergency rule at any time. Any patients being treated in the off-site facility at the time approval is withdrawn shall be safely relocated as soon as practicable according to the ESRD facility's policies and procedures.

(g) If an executive order or other direction is issued by the Governor of Texas, the President of the United States, or another applicable authority that is more restrictive than this section or any minimum

standard relating to an ESRD facility, the ESRD facility must comply with the executive order or other direction.

The agency certifies that legal counsel has reviewed the emergency adoption and found it to be within the state agency's legal authority to adopt.

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Karen Ray

Chief Counsel

Health and Human Services Commission

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For further information, please call: (512) 834-4591



CHAPTER 550. LICENSING STANDARDS FOR PRESCRIBED PEDIATRIC EXTENDED CARE CENTERS

SUBCHAPTER C. GENERAL PROVISIONS DIVISION 1. OPERATIONS AND SAFETY PROVISIONS

26 TAC §550.213

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) adopts on an emergency basis in Title 26 Texas Administrative Code, Chapter 550, Licensing Standards for Prescribed Pediatric Extended Care Centers, Subchapter C, General Provisions, Division 1, Operations and Safety Provisions, new §550.213, concerning an emergency rule in response to COVID-19 in order to reduce the risk of transmission of COVID-19. As authorized by Texas Government Code §2001.034, HHSC may adopt an emergency rule without prior notice or hearing upon finding that an imminent peril to the public health, safety, or welfare requires adoption on fewer than 30 days' notice. Emergency rules adopted under Texas Government Code §2001.034 may be effective for not longer than 120 days and may be renewed for not longer than 60 days.

BACKGROUND AND PURPOSE

The purpose of the emergency rulemaking is to support the Governor's March 13, 2020, proclamation certifying that the COVID-19 virus poses an imminent threat of disaster in the state and declaring a state of disaster for all counties in Texas. In this proclamation, the Governor authorized the use of all available resources of state government and of political subdivisions that are reasonably necessary to cope with this disaster and directed that government entities and businesses would continue providing essential services. HHSC accordingly finds that an imminent peril to the public health, safety, and welfare of the state requires immediate adoption of this Emergency Rule for Prescribed Pediatric Extended Care Center Response to COVID-19--Screening and Infection Control Policies and Procedures.

To protect minors being served in a prescribed pediatric extended care center and the public health, safety, and welfare of the state during the COVID-19 pandemic, HHSC is adopting an emergency rule to require prescribed pediatric extended care

centers to develop and enforce policies and procedures for infection control.

STATUTORY AUTHORITY

The emergency rulemaking is adopted under Texas Government Code §2001.034 and §531.0055 and Texas Health and Safety Code §248A.101. Texas Government Code §2001.034 authorizes the adoption of emergency rules without prior notice and hearing if an agency finds that an imminent peril to the public health, safety, or welfare requires adoption of a rule on fewer than 30 days' notice. Texas Government Code §531.0055 authorizes the Executive Commissioner of HHSC to adopt rules and policies necessary for the operation and provision of health and human services by the health and human services system. Texas Health and Safety Code §248A.101 authorizes the Executive Commissioner of HHSC to adopt rules to implement Texas Health and Safety Code §248A, including rules prescribing minimum standards to protect the health and safety of minors being served in prescribed pediatric extended care centers.

The new section implements Texas Government Code §2001.034 and §531.0055 and Texas Health and Safety Code §248A.101.

§550.213. Emergency Rule for Prescribed Pediatric Extended Care Center Response to COVID-19--Screening and Infection Control Policies and Procedures.

(a) Based on state law and federal guidance, the Texas Health and Human Services Commission (HHSC) finds COVID-19 to be a health and safety risk and requires a prescribed pediatric extended care center to take the following measures. The screening required by this section does not apply to emergency services personnel entering the center in an emergency.

(b) In this section:

(1) Providers of essential services include, but are not limited to, contract doctors, contract nurses, therapists, dietitians, social workers, and home health workers whose services are necessary to ensure minors' health and safety.

(2) Persons with legal authority to enter include, but are not limited to, law enforcement officers, representatives of Disability Rights Texas, representatives of the long-term care ombudsman's office, and government personnel performing their official duties.

(3) Persons providing critical assistance include providers of essential services and persons with legal authority to enter.

(c) A prescribed pediatric extended care center must take the temperature of every person upon arrival and must not allow a person with a fever as described in subsection (g) of this section to enter or remain in the center.

(d) Staff who do not pass screening as described in subsection (g) of this section must not be allowed into the center until they meet the CDC recommendations to be able to return to work.

(e) A minor who does not pass screening as described in subsection (g) of this section must not be allowed into the center until they meet the CDC recommendations to be able to return to the center.

(f) A prescribed pediatric extended care center must prohibit visitors, except as provided in subsection (g) of this section.

(g) A prescribed pediatric extended care center must allow entry of persons providing critical assistance, unless the person meets one or more of the following screening criteria:

(1) fever, defined as a temperature of 100.4 Fahrenheit and above, or by the most current Centers for Disease Control and Prevention (CDC) guidance;

(2) signs or symptoms of COVID-19, including chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea;

(3) additional signs and symptoms as outlined by the CDC in Symptoms of Coronavirus at [cdc.gov](https://www.cdc.gov);

(4) contact in the last 14 days, unless to provide critical assistance, with someone who has a confirmed diagnosis of COVID-19, is under investigation for COVID-19, or is ill with a respiratory illness, regardless of whether the person is fully vaccinated; or

(5) testing positive for COVID-19 in the last 10 days.

(h) A facility must not prohibit government personnel performing their official duty from entering the facility, unless the individual meets the screening criteria of this section.

(i) A prescribed pediatric extended care center must develop and enforce written policies and procedures for infection control. The written standards, policies and procedures for the center must include standard and transmission-based precautions to prevent the spread of COVID-19, including the appropriate use of personal protective equipment.

(j) If this emergency rule is more restrictive than any minimum standard relating to a prescribed pediatric extended care center, this emergency rule will prevail so long as this emergency rule is in effect.

(k) If an executive order or other direction is issued by the Governor of Texas, the President of the United States, or another applicable authority, that is more restrictive than this emergency rule or any minimum standard relating to a prescribed pediatric extended care center, the prescribed pediatric extended care center must comply with the executive order or other direction.

The agency certifies that legal counsel has reviewed the emergency adoption and found it to be within the state agency's legal authority to adopt.

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Karen Ray

Chief Counsel

Health and Human Services Commission

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For further information, please call: (512) 438-3161



CHAPTER 554. NURSING FACILITY REQUIREMENTS FOR LICENSURE AND MEDICAID CERTIFICATION

SUBCHAPTER CC. COVID-19 EMERGENCY RULE

26 TAC §554.2802

The Health and Human Services Commission is renewing the effectiveness of emergency new §554.2802 for a 60-day period.

The text of the emergency rule was originally published in the June 11, 2021, issue of the *Texas Register* (46 TexReg 3593).

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103809

Nycia Deal

Attorney

Health and Human Services Commission

Original effective date: June 1, 2021

Expiration date: November 27, 2021

For further information, please call: (512) 438-3161



26 TAC §554.2803

The Health and Human Services Commission is renewing the effectiveness of emergency new §554.2803 for a 60-day period. The text of the emergency rule was originally published in the June 11, 2021, issue of the *Texas Register* (46 TexReg 3596).

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Nycia Deal

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CHAPTER 558. LICENSING STANDARDS FOR HOME AND COMMUNITY SUPPORT SERVICES AGENCIES

SUBCHAPTER I. RESPONSE TO COVID-19 AND PANDEMIC-LEVEL COMMUNICABLE DISEASE

26 TAC §558.960

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) adopts on an emergency basis in Title 26 Texas Administrative Code, Chapter 558, Licensing Standards for Home and Community Support Services Agencies, new §558.960, concerning an emergency rule in response to COVID-19 in order to reduce the risk of transmission of COVID-19. As authorized by Texas Government Code §2001.034, the Commission may adopt an emergency rule without prior notice or hearing upon finding that an imminent peril to the public health, safety, or welfare requires adoption on fewer than 30 days' notice. Emergency rules adopted under Texas Government Code §2001.034 may be effective for not longer than 120 days and may be renewed for not longer than 60 days.

BACKGROUND AND PURPOSE

The purpose of the emergency rulemaking is to support the Governor's March 13, 2020, proclamation certifying that the

COVID-19 virus poses an imminent threat of disaster in the state and declaring a state of disaster for all counties in Texas. In this proclamation, the Governor authorized the use of all available resources of state government and of political subdivisions that are reasonably necessary to cope with this disaster and directed that government entities and businesses would continue providing critical essential services. HHSC accordingly finds that an imminent peril to the public health, safety, and welfare of the state requires immediate adoption of this Emergency Rule for HCSSA Response to COVID-19.

To protect clients served by home and community support services agencies (HCSSAs) and the public health, safety, and welfare of the state during the COVID-19 pandemic, HHSC is adopting an emergency rule to define criteria for screening staff, clients, and household members for COVID-19, to require that related documentation be made available to HHSC upon request, and to clarify that HCSSA staff must comply with a long-term care facility's infection control protocols when entering to provide essential services.

STATUTORY AUTHORITY

The emergency rulemaking is adopted under Texas Government Code §2001.034 and §531.0055 and Texas Health and Safety Code §142.012. Texas Government Code §2001.034 authorizes the adoption of emergency rules without prior notice and hearing, if an agency finds that an imminent peril to the public health, safety, or welfare requires adoption of a rule on fewer than 30 days' notice. Texas Government Code §531.0055 authorizes the Executive Commissioner of HHSC to adopt rules and policies necessary for the operation and provision of health and human services by the health and human services system. Texas Health and Safety Code §142.012, authorizes the Executive Commissioner of HHSC to adopt rules necessary to implement Chapter 142 of the Texas Health and Safety Code, concerning Home and Community Support Services. Texas Health and Safety Code §142.012, authorizes the Executive Commissioner of HHSC to adopt rules governing minimum standards for HCSSAs that are necessary to protect the public.

The new section implements Texas Government Code §531.0055 and Texas Health and Safety Code §142.012.

§558.960. Emergency Rule for HCSSA Response to COVID-19.

(a) Based on state law and federal guidance, the Texas Health and Human Services Commission (HHSC) finds COVID-19 to be a health safety risk and requires a home and community support services agency (HCSSA) to take the following measures. The screening required by this section does not apply to emergency services personnel entering an agency in an emergency situation.

(b) For the purposes of this section, personal protective equipment means specialized clothing or equipment worn by agency staff for protection against transmission of infectious diseases such as COVID-19, including surgical or N95 masks, goggles, gloves, and disposable gowns.

(c) Agency staff have legal authority to enter a facility licensed under Texas Health and Safety Code Chapters 242, 247, or 252, or Texas Human Resources Code Chapter 103, to provide services to the facility's residents who are agency clients. Agency staff entering a licensed facility must follow the infection control protocols of the facility.

(d) An agency must screen its staff and must not allow staff to remain in the agency, enter a licensed facility, or make home visits if the

employee, volunteer or contractor meets one or more of the following screening criteria:

(1) fever defined as a temperature of 100.4 Fahrenheit and above, or by the most current Centers for Disease Control and Prevention (CDC) guidance relating to fever or signs or symptoms of a respiratory infection, such as cough, shortness of breath or sore throat;

(2) signs or symptoms of COVID-19, including chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea;

(3) additional signs and symptoms as outlined by the CDC in Symptoms or Coronavirus at [cdc.gov](https://www.cdc.gov);

(4) contact in the last 14 days with someone who has a confirmed diagnosis of COVID-19, is under investigation for COVID-19, or is ill with a respiratory illness, regardless of whether the person is fully vaccinated, unless the person is conducting the visit to provide essential services; or

(5) testing positive for COVID-19 in the last 10 days.

(e) The agency must:

(1) document the results of all required screenings; and

(2) ensure documentation must be retrievable for review upon request by HHSC.

(f) The agency must determine if a scheduled home visit requires essential services or non-essential services.

(1) Essential services include a service that must be delivered to ensure the client's health and safety, such as nursing services, therapies, medication administration, assisting with self-administered medications and other personal care tasks, wound care, transfer, or ambulation. This is determined on a case-by-case basis and according to the client's need for the service on the day of the scheduled visit in accordance with the plan of care, care plan, or individualized service plan (ISP).

(2) If the visit requires non-essential services, the visit:

(A) must be conducted by phone or video conference, if possible; or

(B) must be rescheduled for a later date.

(3) If the visit requires essential services, staff must conduct the visit in person and screen the client and household members using the same criteria for staff that is described in subsection (d) of this section and proceed as described in subparagraphs (A) and (B) of this paragraph.

(A) If the client or a member of the household meet one or more of the screening criteria, use appropriate personal protective equipment during the visit.

(B) If the client or a member of the household does not meet one or more of the screening criteria, conduct the visit as indicated for the type of service provided.

(4) An agency must document any missed visits in the plan of care, care plan, or ISP and notify the attending physician or practitioner, if applicable.

(g) Providers of essential services include HCSSA employees and contractors, including but not limited to physicians, nurses, hospice aides, home health aides, attendants, social workers, therapists, spiritual counselors, and volunteers in any of those roles.

(h) A parent agency administrator or alternate administrator, or supervising nurse or alternate supervising nurse may make the monthly supervisory visit required for branch supervision by §558.321(d)(1) of this chapter (relating to Standards for Branch Offices) or as required for alternative delivery site by §558.322(c)(1) of this chapter (relating to Standards for Alternate Delivery Sites) by virtual communication, such as video or telephone conferencing systems.

(i) A hospice registered nurse may make the supervisory visit required for hospice aides in §558.842(d) of this chapter (relating to Hospice Aide Services) by virtual communication, such as video or telephone conferencing systems.

(j) If this emergency rule is more restrictive than any minimum standard relating to a HCSSA, this emergency rule will prevail so long as this emergency rule is in effect.

(k) If an executive order or other direction is issued by the Governor of Texas, the President of the United States, or another applicable authority, that is more restrictive than this emergency rule or any minimum standard relating to a HCSSA, the HCSSA must comply with the executive order or other direction.

The agency certifies that legal counsel has reviewed the emergency adoption and found it to be within the state agency's legal authority to adopt.

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Karen Ray

Chief Counsel

Health and Human Services Commission

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For further information, please call: (512) 438-3161



CHAPTER 559. DAY ACTIVITY AND HEALTH SERVICES REQUIREMENTS

SUBCHAPTER D. LICENSURE AND PROGRAM REQUIREMENTS

26 TAC §559.65

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC or Commission) adopts on an emergency basis in Title 26, Texas Administrative Code, Chapter 559, Day Activity and Health Services Requirements, new §559.65, concerning an emergency rule in response to COVID-19 in order to reduce the risk of transmission of COVID-19. As authorized by Texas Government Code §2001.034, the Commission may adopt an emergency rule without prior notice or hearing upon finding that an imminent peril to the public health, safety, or welfare requires adoption on fewer than 30 days' notice. Emergency rules adopted under Texas Government Code §2001.034 may be effective for not longer than 120 days and may be renewed for not longer than 60 days.

BACKGROUND AND PURPOSE

The purpose of the emergency rulemaking is to support the Governor's March 13, 2020, proclamation certifying that the

COVID-19 virus poses an imminent threat of disaster in the state and declaring a state of disaster for all counties in Texas. In this proclamation, the Governor authorized the use of all available resources of state government and of political subdivisions that are reasonably necessary to cope with this disaster and directed that government entities and businesses would continue providing essential services. HHSC accordingly finds that an imminent peril to the public health, safety, and welfare of the state requires immediate adoption of this Emergency Rule for Day Activity and Health Services Response to COVID-19 - Screening, Activities and Infection Control Policies and Procedures.

To protect day activity and health services clients and the public health, safety, and welfare of the state during the COVID-19 pandemic, HHSC is adopting an emergency rule to require day activity and health services providers to develop and enforce policies and procedures for infection control.

STATUTORY AUTHORITY

The emergency rulemaking is adopted under Texas Government Code §2001.034 and §531.0055 and Texas Human Resources Code §103.004 and §103.005. Texas Government Code §2001.034 authorizes the adoption of emergency rules without prior notice and hearing, if an agency finds that an imminent peril to the public health, safety, or welfare requires adoption of a rule on fewer than 30 days' notice. Texas Government Code §531.0055 authorizes the Executive Commissioner of HHSC to adopt rules and policies necessary for the operation and provision of health and human services by the health and human services system. Texas Human Resources Code §103.004 authorizes the Executive Commissioner of HHSC to adopt rules implementing Texas Human Resources Code, Chapter 103, concerning Day Activity and Health Services Facilities. Texas Human Resources Code §103.005 authorizes the Executive Commissioner of HHSC to adopt rules governing the standards for safety and sanitation of a licensed day activity and health services facility.

The new section implements Texas Government Code §2001.034 and §531.0055 and Texas Human Resources Code Chapter §103.004 and §103.005.

§559.65. Emergency Rule for Day Activity and Health Services Response to COVID-19 - Screening, Activities and Infection Control Policies and Procedures.

(a) Based on state law and federal guidance, the Texas Health and Human Services Commission (HHSC) finds COVID-19 to be a health and safety risk and requires a day activity and health services facility to take the following measures. The screening required by this section does not apply to emergency services personnel entering the facility in an emergency situation.

(b) In this section:

(1) providers of essential services include contract doctors, contract nurses, contract healthcare workers, spiritual clergy, volunteers assisting with facility-coordinated group activities and home health workers whose services are necessary to ensure client health and safety;

(2) persons with legal authority to enter include law enforcement officers and government personnel performing their official duties; and

(3) persons providing critical assistance include providers of essential services and persons with legal authority to enter.

(c) A day activity and health services facility must take the temperature of every person upon arrival and must not allow a person with a fever as described in subsection (e) of this section to enter or remain in the facility.

(d) A day activity and health services facility must prohibit visitors, except as provided in subsection (e) of this section.

(e) A day activity and health services facility must allow entry of persons providing critical assistance, including volunteers assisting with facility-coordinated group activities, unless the person meets one or more of the following screening criteria:

(1) fever, defined as a temperature of 100.4 Fahrenheit and above, or by the most current Centers for Disease Control and Prevention (CDC) guidance;

(2) signs or symptoms of COVID-19, including chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea;

(3) additional signs and symptoms as outlined by the CDC in Symptoms of Coronavirus at [cdc.gov](https://www.cdc.gov);

(4) contact in the last 14 days, unless to provide critical assistance, with someone who has a confirmed diagnosis of COVID-19, someone who is under investigation for COVID-19, or someone who is ill with a respiratory illness, regardless of whether or not the person has been fully vaccinated; or

(5) testing positive for COVID-19 in the last 10 days.

(f) A facility must develop and enforce policies and procedures for infection control. The written standards, policies, and procedures must include standard and transmission-based precautions to prevent the spread of COVID-19, including appropriate use of personal protective equipment (PPE).

(g) A facility must not prohibit government personnel performing their official duty from entering the facility, unless the individual meets the above screening criteria.

(h) A facility may offer facility-coordinated group activities as well as allow volunteers to enter the facility to assist with the activities. Facilities that allow volunteers to enter the facility to assist with activities must ensure the following:

(1) volunteers must be trained on proper infection and prevention control standards;

(2) volunteers must pass all screening requirements, as outlined in subsection (e) of this section and must be overseen by facility staff; and

(3) volunteers must adhere to the same PPE requirements as staff.

(i) Facilities must execute a written agreement with all volunteers documenting training requirements and facility policies regarding infection and prevention control standards.

(j) If this emergency rule is more restrictive than any minimum standard relating to a day activity and health services facility, this emergency rule will prevail so long as this emergency rule is in effect.

(k) If an executive order or other direction is issued by the Governor of Texas, the President of the United States, or another applicable authority, that is more restrictive than this emergency rule or any minimum standard relating to a day activity and health services facility, the day activity and health services facility must comply with the executive order or other direction.

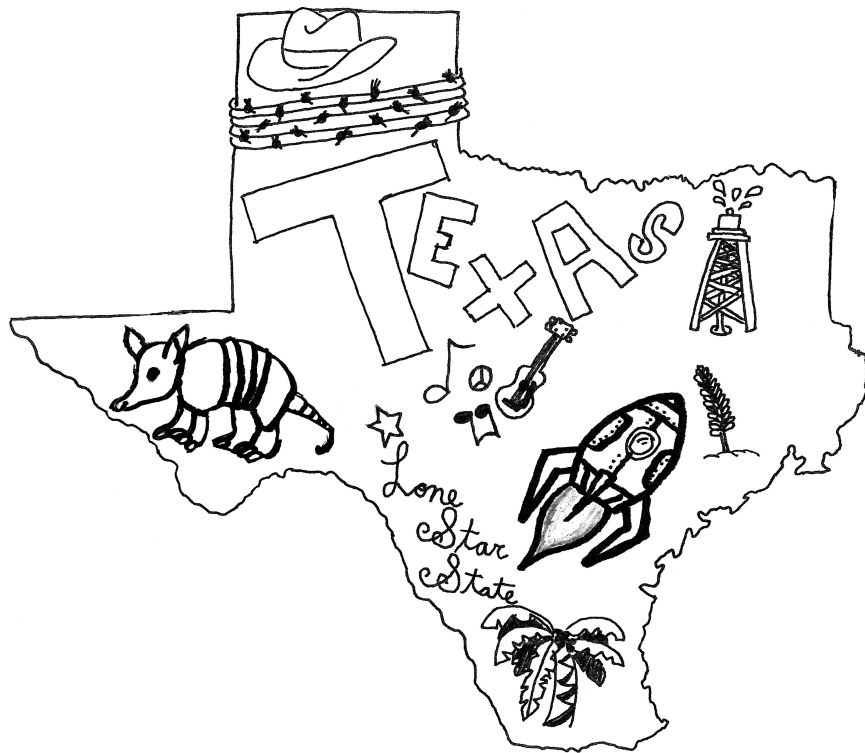
The agency certifies that legal counsel has reviewed the emergency adoption and found it to be within the state agency's legal authority to adopt.

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Karen Ray
Chief Counsel
Health and Human Services Commission
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For further information, please call: (512) 438-3161





PROPOSED RULES

Proposed rules include new rules, amendments to existing rules, and repeals of existing rules. A state agency shall give at least 30 days' notice of its intention to adopt a rule before it adopts the rule. A state agency shall give all interested persons a reasonable opportunity to

submit data, views, or arguments, orally or in writing (Government Code, Chapter 2001).

Symbols in proposed rule text. Proposed new language is indicated by underlined text. [~~Square brackets and strikethrough~~] indicate existing rule text that is proposed for deletion. "(No change)" indicates that existing rule text at this level will not be amended.

TITLE 1. ADMINISTRATION

PART 15. TEXAS HEALTH AND HUMAN SERVICES COMMISSION

CHAPTER 353. MEDICAID MANAGED CARE SUBCHAPTER O. DELIVERY SYSTEM AND PROVIDER PAYMENT INITIATIVES

1 TAC §353.1305

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes an amendment to 1 TAC §353.1305, concerning the Uniform Hospital Rate Increase Program for program periods before September 1, 2021.

BACKGROUND AND PURPOSE

The purpose of the proposed amendment to §353.1305 is to extend the date for the Uniform Hospital Rate Increase Program (UHRIP) to apply to program periods before September 1, 2022 or as approved by the Centers for Medicare and Medicaid Services (CMS).

SECTION-BY-SECTION SUMMARY

The proposed amendment to §353.1305(a) replaces the date "September 1, 2021" with "September 1, 2022" and adds "or for the time period as approved by the Centers for Medicare and Medicaid Services" to extend the program an additional year or as approved by CMS. The date is deleted in the title of the rule. The acronym "MCO" is also spelled out.

FISCAL NOTE

Trey Wood, Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

For each year of the first five years that the rule will be in effect, enforcing or administering the rule has implications relating to revenues of local governments. The effect is projected to be a net increase to revenues of local governments of approximately \$1,232,067,032 in non-federal share \$3,325,417,091 All Funds (AF) for State Fiscal Year (SFY) 2022 and no impact thereafter as the program is expected to end.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

(1) the proposed rule will not create or eliminate a government program;

(2) implementation of the proposed rule will not affect the number of HHSC employee positions;

(3) implementation of the proposed rule will not require an increase in future legislative appropriations;

(4) the proposed rule will not affect fees paid to HHSC;

(5) the proposed rule will not create a new rule;

(6) the proposed rule will expand an existing rule;

(7) the proposed rule will not change the number of individuals subject to the rule; and

(8) the proposed rule will positively affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be no adverse economic effect on small businesses or micro-businesses, or rural communities.

The rule does not impose any additional costs on small businesses, micro-businesses, or rural communities required to comply with the rule.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule does not impose a cost on regulated persons.

PUBLIC BENEFIT AND COSTS

Victoria Grady, Director of Provider Finance, has determined that for each year of the first five years, the public benefit will be continuation of the UHRIP program for an additional year.

Trey Wood has also determined that for the first five years the rule is in effect, there are no anticipated economic costs to persons who are required to comply with the proposed rule. There is no requirement to alter current business practices and no new fees or costs imposed on those required to comply.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to his or her property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC HEARING

A public hearing to receive comments on the proposal will be held by HHSC through a webinar. The meeting date and time will be posted on the HHSC Communications and Events Website at <https://hhs.texas.gov/about-hhs/communication>.

tions-events and the HHSC Provider Finance Communications website at <https://pfd.hhs.texas.gov/provider-finance-communications>. Please contact Robert Jacques at PFD_hospitals@hhsc.state.tx.us if you have questions about the hearing.

PUBLIC COMMENT

Questions about the content of this proposal may be directed to Cristina Melendez in the HHSC Provider Finance for Hospitals department at PFD_hospitals@hhsc.state.tx.us.

Written comments on the proposal may be submitted to the HHSC Provider Finance Department, 4601 W. Guadalupe St., Austin, Texas 78751 (Mail Code H-400); P.O. Box 149030, Austin, Texas 78714-9030 (Mail Code H-400); by fax to (512) 730-7475; or by email to PFD_hospitals@hhsc.state.tx.us.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) faxed or emailed before midnight on the last day of the comment period. If the last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When faxing or emailing comments, please indicate "Comments on Proposed Rule 21R165" in the subject line.

STATUTORY AUTHORITY

The amendment is proposed under Texas Government Code §531.033, which authorizes the Executive Commissioner of HHSC to adopt rules necessary to carry out HHSC's duties; Texas Human Resources Code §32.021 and Texas Government Code §531.021(a), which provide HHSC with the authority to administer the federal medical assistance (Medicaid) program in Texas; Texas Government Code §531.021(b-1), which establishes HHSC as the agency responsible for adopting reasonable rules governing the determination of fees, charges, and rates for medical assistance payments under the Texas Human Resources Code Chapter 32; and Texas Government Code §533.002, which authorizes HHSC to implement the Medicaid managed care program.

The amendment affects Texas Government Code Chapters 531 and 533 and Texas Human Resources Code Chapter 32.

§353.1305. Uniform Hospital Rate Increase Program [for program periods before September 1, 2021].

(a) Introduction. This section describes the circumstances for program periods before September 1, 2022, or for the time period as approved by the Centers for Medicare and Medicaid Services [2024], under which HHSC directs a Managed Care Organization (MCO) [an MCO] to provide a uniform percentage rate increase to hospitals in the MCO's network in a designated service delivery area (SDA) for the provision of inpatient services, outpatient services, or both. This section also describes the methodology used by HHSC to calculate and administer such rate increase.

(b) Definitions. The following definitions apply when the terms are used in this section. Terms that are used in this and other sections of this subchapter may be defined in §353.1301 of this subchapter (relating to General Provisions).

(1) Children's hospital--A Medicaid hospital designated by Medicare as a children's hospital.

(2) Inpatient hospital services--Services ordinarily furnished in a hospital for the care and treatment of inpatients under

the direction of a physician or dentist, or a subset of these services identified by HHSC. Inpatient hospital services do not include skilled nursing facility or intermediate care facility services furnished by a hospital with swing-bed approval, and any other services that HHSC determines should not be subject to the rate increase.

(3) Institution for mental diseases (IMD)--A hospital that is primarily engaged in providing psychiatric diagnosis, treatment, or care of individuals with mental illness.

(4) Non-urban public hospital--

(A) A hospital owned and operated by a governmental entity, other than a hospital described in paragraph (8) of this subsection, defining rural public hospital, or a hospital described in paragraph (10) of this subsection, defining urban public hospital; or

(B) A hospital meeting the definition of rural public-financed hospital in §355.8065(b)(37) of this title (relating to Disproportionate Share Hospital Reimbursement Methodology), other than a hospital described in paragraph (7) of this subsection defining rural private hospital.

(5) Outpatient hospital services--Preventive, diagnostic, therapeutic, rehabilitative, or palliative services that are furnished to outpatients of a hospital under the direction of a physician or dentist, or a subset of these services identified by HHSC. HHSC may, in its contracts with MCOs governing rate increases under this section, exclude from the definition of outpatient hospital services such services as are not generally furnished by most hospitals in the state, or such services that HHSC determines should not be subject to the rate increase.

(6) Program period--A period of time for which HHSC will contract with participating MCOs to pay increased capitation rates for the purpose of provider payments under this section. Each program period is equal to a state fiscal year beginning September 1 and ending August 31 of the following year. An SDA that is unable to participate in the program described in this section beginning September 1 may apply to participate beginning March 1 of the program period and ending August 31. Participation during such a modified program period is subject to the application and intergovernmental-transfer deadlines described in subsection (g) of this section.

(7) Rural private hospital--A privately-operated hospital that is a rural hospital as defined in §355.8052 of this title (relating to Inpatient Hospital Reimbursement).

(8) Rural public hospital--A hospital that is owned and operated by a governmental entity and is a rural hospital as defined in §355.8052 of this title.

(9) State-owned hospital--A hospital that is owned and operated by a state university or other state agency.

(10) Urban public hospital--A hospital that is operated by or under a lease contract with one of the following entities: the Dallas County Hospital District, the El Paso County Hospital District, the Harris County Hospital District, the Tarrant County Hospital District, the Travis County Healthcare District dba Central Health, the University Health System of Bexar County, the Ector County Hospital District, the Lubbock County Hospital District, or the Nueces County Hospital District.

(c) Classes of participating hospitals.

(1) HHSC may direct the MCOs in an SDA that is participating in the program described in this section to provide a uniform percentage rate increase to all hospitals within one or more of the following classes of hospital with which the MCO contracts for inpatient or outpatient services:

- (A) children's hospitals;
- (B) non-urban public hospitals;
- (C) rural private hospitals;
- (D) rural public hospitals;
- (E) state-owned hospitals;
- (F) urban public hospitals;
- (G) non-state-owned IMDs; and
- (H) all other hospitals.

(2) If HHSC directs rate increases to more than one class of hospital within the SDA, the percentage rate increases directed by HHSC may vary between classes of hospital.

(d) Eligibility. HHSC determines eligibility for rate increases by SDA and class of hospital.

(1) Service delivery area. Only hospitals in an SDA that includes at least one sponsoring governmental entity are eligible for a rate increase.

(2) Class of hospital. HHSC will identify the class or classes of hospital within each SDA described in paragraph (1) of this subsection to be eligible for a rate increase. HHSC will consider the following factors when identifying the class or classes of hospital eligible for a rate increase and the percent increase applicable to each class:

(A) whether a class of hospital contributes more or less significantly to the goals and objectives in HHSC's quality strategy, as required in 42 C.F.R. §438.340, relative to other classes;

(B) which class or classes of hospital the sponsoring governmental entity wishes to support through intergovernmental transfers (IGTs) of public funds, as indicated on the application described in subsection (g) of this section; and

(C) the percentage of Medicaid costs incurred by the class of hospital in providing care to Medicaid managed care clients that are reimbursed by Medicaid MCOs prior to any uniform rate increase administered under this section.

(e) Services subject to rate increase.

(1) HHSC may direct the MCOs in an SDA to increase rates for all or a subset of inpatient services, all or a subset of outpatient services, or all or a subset of both, based on the service or services that will best advance the goals and objectives of HHSC's quality strategy.

(2) In addition to the limitations described in paragraph (1) of this subsection, rate increases for a non-state-owned IMD are limited to inpatient psychiatric hospital services provided to individuals under the age of 21 and to inpatient hospital services provided to individuals 65 years or older.

(3) UHRIP rate increases will apply only to the in-network managed care claims billed under a hospital's primary National Provider Identifier (NPI) and will not be applicable to NPIs associated with non-hospital sub-providers owned or operated by a hospital.

(f) Determination of percentage of rate increase.

(1) In determining the percentage of rate increase applicable to one or more classes of hospital, HHSC will consider the following factors:

(A) information from the participants in the SDA (including hospitals, managed-care organizations, and sponsoring gov-

ernmental entities) on one or both of the following, as indicated on the application described in subsection (g) of this section:

(i) the amount of IGT the sponsoring governmental entities propose to transfer to HHSC to support the non-federal share of the increased rates for the first six months of a program period; and

(ii) the percentage rate increase the SDA participants propose for one or more classes of hospital for the first six months of a program period;

(B) the class or classes of hospital determined in subsection (d)(2) of this section;

(C) the type of service or services determined in subsection (e) of this section;

(D) actuarial soundness of the capitation payment needed to support the rate increase;

(E) available budget neutrality room under any applicable federal waiver programs;

(F) hospital market dynamics within the SDA; and

(G) other HHSC goals and priorities.

(2) HHSC will limit the percentage rate increases determined pursuant to this subsection to no more than the levels that are supported by the amount described in paragraph (1)(A)(i) of this subsection. Nothing in this section may be construed to limit the authority of the state to require the sponsoring governmental entities to transfer additional funds to HHSC following the reconciliation process described in §353.1301(g) of this title, if the amount previously transferred is less than the non-federal share of the amount expended by HHSC in the SDA for this program.

(3) After determining the percentage of rate increase using the process described in paragraphs (1) and (2) of this subsection, HHSC will modify its contracts with the MCOs in the SDA to direct the percentage rate increases.

(g) Application process; timing and amount of transfer of non-federal share.

(1) The stakeholders in an SDA initiate the request for HHSC to implement a uniform hospital rate increase program by submitting an application using a form prescribed by HHSC.

(A) The stakeholders in the SDA, including hospitals, sponsoring governmental entities, and MCOs, are expected to work cooperatively to complete the application.

(B) The application provides an opportunity for stakeholders to have input into decisions about which classes of hospital and services are subject to the rate increases, and the percentage rate increase applicable to each class, but HHSC retains the final decision-making authority on these aspects of the program following the processes described in subsections (d) - (f) of this section.

(C) HHSC must receive the completed application no later than six months before the beginning of the program period or modified program period in which the SDA proposes to participate.

(D) HHSC will process the application, contact SDA representatives or stakeholders if there are questions, and notify the stakeholders in the SDA of its decisions on the application, including the classes of hospital eligible for the rate increase, the services subject to the increase, the percentage rate increase applicable to each class, and the total amount of IGT required for the first six months of the program period.

(2) Sponsoring governmental entities must complete the IGT for the first six months of the program period no later than four months prior to the start of the program period, unless otherwise instructed by HHSC. For example, for the program period beginning September 1, 2017, HHSC must receive the IGT for the first six months no later than May 1, 2017; for the modified program period beginning March 1, 2018, HHSC must receive the IGT no later than November 1, 2017.

(3) Following the transfer of funds described in paragraph (2) of this subsection, sponsoring governmental entities must transfer additional IGT at such times and in such amounts as determined by HHSC to be necessary to ensure the availability of funding of the non-federal share of the state's expenditures under this section and HHSC's compliance with the terms of its contracts with MCOs in the SDA. In no event may transfers for directed increases in a program period occur later than November 1 of the calendar year.

(4) HHSC will instruct sponsoring governmental entities as to the required IGT amounts. Required IGT amounts will include all costs associated with the uniform rate increase, including costs associated with premium taxes, risk margins, and administration, plus ten percent.

(h) Effective date of rate increases. HHSC will direct MCOs to increase rates under this section beginning the first day of the program period that includes the increased capitation rates paid by HHSC to each MCO pursuant to the contract between them.

(i) Reconciliation. HHSC will reconcile the amount of the non-federal funds actually expended under this section during the program period with the amount of funds transferred to HHSC by the sponsoring governmental entities for that same period using the methodology described in §353.1301(g) of this subchapter.

(j) Recoupment. Payments under this section may be subject to recoupment as described in §353.1301(k) of this subchapter.

(k) December 2017 limited eligibility. Notwithstanding the other provisions of this section, any SDA that received approval from CMS by April 15, 2017, may participate in the program described in this section for dates of service beginning December 1, 2017. Sponsoring governmental entities must complete the IGT for the period of December 1, 2017, through February 28, 2018, by a date to be determined by HHSC.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103794

Karen Ray

Chief Counsel

Texas Health and Human Services Commission

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For further information, please call: (737) 867-7813



CHAPTER 355. REIMBURSEMENT RATES SUBCHAPTER J. PURCHASED HEALTH SERVICES

DIVISION 11. TEXAS HEALTHCARE TRANSFORMATION AND QUALITY IMPROVEMENT PROGRAM REIMBURSEMENT

1 TAC §355.8200

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes a new rule §355.8200, concerning Retained Funds for the Uncompensated Care Program, in Texas Administrative Code, Title 1, Part 15, Chapter 355, Subchapter J, Division 11.

BACKGROUND AND PURPOSE

The proposed new rule will authorize HHSC to set and collect an application fee for the Uncompensated Care (UC) program currently valued at \$3.9 billion annually, in accordance with 42 CFR §433.68(d)(1)(iv).

The proposal is necessary to comply with Senate Bill (S.B.) 2138, 86th Legislature, Regular Session, 2019 and S.B. 1 (Article II, Texas Health and Human Services Commission, Rider 15), 87th Legislature, Regular Session, 2021. The establishment of a rule is critical to the ability to support the infrastructure needed to operate and safeguard the UC program operated under the Texas Healthcare Transformation and Quality Improvement Project 1115 waiver (THTQIP). The amount of the application fee will be determined based on the cost necessary to administer the program and the funds will be spent to assist in administering the UC program.

During the 86th Texas Legislative Session, the Texas legislature passed S.B. 2138, which gave HHSC the authority to retain certain funds. The bill established reporting requirements and limitations on the amount of funds that could be collected. The 87th Texas Legislature adopted a rider in S.B. 1 that has given HHSC the authority to increase the number of full-time equivalents for increased monitoring and oversight of the use of local funds and the administration of new programs. HHSC is now creating a monitoring plan to oversee the use of local funds in the Medicaid program.

The required application fee will be implemented beginning October 1, 2021.

SECTION-BY-SECTION SUMMARY

Proposed new §355.8200(a) provides the purpose and start date for the UC application fee.

Proposed new §355.8200(b) defines the term "non-public provider."

Proposed new §355.8200(c) provides the scope of applicability.

Proposed new §355.8200(d) provides an explanation of the application fee, including use, total limitation, and effective time period.

Proposed new §355.8200(e) provides an explanation of the uses of the funds and limitations.

FISCAL NOTE

Trey Wood, Chief Financial Officer, has determined that for each year that the rule will be in effect, \$2.7 million will be retained. Enforcing or administering the rule does have any other foreseeable implications relating to costs or state government.

The effect on state government for each year of the first five years the proposed rule is in effect is an estimated increase in

revenue of \$5,400,000 in fiscal year (FY) 2022, \$5,400,000 in FY 2023, \$5,400,000 in FY 2024, \$5,400,000 in FY 2025, and \$5,400,000 in FY 2026.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will affect fees paid to HHSC;
- (5) the proposed rule will create a new rule;
- (6) the proposed rule will not expand existing rules;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) HHSC has insufficient information to determine the proposed rule's effect on the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that the proposal will not have an adverse economic effect on small businesses, micro-businesses, and rural communities because participation in the program is optional.

LOCAL EMPLOYMENT IMPACT

This rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rule.

PUBLIC BENEFIT AND COSTS

Victoria Grady, Director of Provider Finance, has determined that for each year the rule is in effect, the public benefit will be better oversight of the use of local funds in the Medicaid program.

Trey Wood has also determined that for the first five years the rules are in effect, there will not be an economic cost to persons required to comply with the proposed rule because participation in the program is optional.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to his or her property that would otherwise exist in the absence of government action. Therefore, the proposal does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to HHSC Provider Finance Department, Mail Code H-400, P.O. Box 149030, Austin, Texas 78714-9030, or by email to PFD-LTSS@hhs.texas.gov.

To be considered, comments must be submitted no later than 21 days after the date of this issue of the *Texas Register*. Com-

ments must be (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If the last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R166" in the subject line.

STATUTORY AUTHORITY

The new section is proposed under Texas Government Code §531.033, which authorizes the Executive Commissioner of HHSC to adopt rules necessary to carry out HHSC's duties; Texas Human Resources Code §32.021 and Texas Government Code §531.021(a), which provide HHSC with the authority to administer the federal medical assistance (Medicaid) program in Texas; Texas Government Code §531.021(b-1), which establishes HHSC as the agency responsible for adopting reasonable rules governing the determination of fees, charges, and rates for medical assistance payments under the Texas Human Resources Code Chapter 32; and Texas Government Code §531.021135, which requires HHSC to adopt rules necessary to implement the section.

The new section affects Texas Government Code Chapter 531 and Texas Human Resources Code Chapter 32.

§355.8200. Retained Funds for the Uncompensated Care Program.

(a) Introduction. Texas Healthcare Transformation and Quality Improvement Program under §1115(a), Medicaid demonstration waiver payments available under this division help to defray the uncompensated cost of charity care provided by eligible hospitals and physician practices on or after October 1, 2019. Participation in the Texas Healthcare Transformation and Quality Improvement Program is subject to an application fee.

(b) Definition. A non-public provider, when the term is used in this section, is defined as a provider who is owned by any entity other than a unit of local, state, or federal government.

(c) Applicability. The requirement to submit an application fee applies to all non-public providers in the state.

(d) Application Fee. An application fee will be required with the submission of the application described in §355.8212(c)(2) of this subchapter.

(1) The application fee will be determined annually based upon an estimate of the amount equal to the estimated costs necessary to administer the program and will be posted on the Texas Health and Human Services Commission Provider Finance Department website.

(2) Payment is due at the time of the submission of the application. If no payment is received with the application, an account receivable will be established. HHSC will offset the next applicable payment to the provider against the account receivable until the obligation to the state is discharged.

(3) Payment must be made in the manner determined by HHSC and in compliance with payment instructions that will be posted on the HHSC Provider Finance Department website.

(c) Uses of the Funds and Limitations.

(1) The total amount received from the application fee may not exceed \$8,000,000 annually when combined with any other funds retained under the authority of Texas Government Code §531.021135.

(2) HHSC will spend money retained under this section to assist in paying the costs necessary to administer the program for which the money is received. HHSC will not use the money to pay any type of administrative cost that was funded with general revenue before June 1, 2019.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103757

Karen Ray

Chief Counsel

Texas Health and Human Services Commission

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 424-6637



TITLE 16. ECONOMIC REGULATION

PART 3. TEXAS ALCOHOLIC BEVERAGE COMMISSION

CHAPTER 33. LICENSING

The Texas Alcoholic Beverage Commission (TABC, agency, or commission) proposes amendments to §§33.5, 33.72, and 33.78; and new §§33.1 and 33.80. The repeal of §33.52 is proposed in a separate, simultaneous proposal.

Background and Summary

The commission proposes new §33.1 to provide in rule the commission's standards for timeliness of filings and to combine the content of current §33.52, regarding how to count days when a rule includes a period of time. A rule related to timely filing is necessitated by the new Alcohol Industry Management System (AIMS), which allows filing of documents at any time through an internet-based portal.

The commission proposes to amend §33.5 to conform with the statutory changes made by S.B. 911 (2021 R.S.), which provides an additional mechanism to obtain a Food and Beverage Certificate, and to clarify language existing in the current rule. Holders of a mixed beverage permit or a private club permit must also hold a Food and Beverage Certificate to engage in delivery and to-go sales of alcoholic beverages. Additionally, areas within certain counties (e.g. Dallas County) have a local option election status wherein holding a Food and Beverage Certificate is a prerequisite to obtaining a permit allowing the sale of liquor for on-premise consumption. Prior to S.B. 911's passage, businesses could not qualify for a Food and Beverage Certificate unless, *inter alia*, the receipts from the sale of alcoholic beverages at the location are 60% or less of the location's total receipts. S.B. 911 allows businesses that meet the newly added definition of a restaurant (see Tex. Alco. Bev. Code §1.04(29) (effective Jan. 1, 2022)) to qualify for a Food and Beverage certificate irrespective of the alcohol sales at the location. Going forward, businesses that do not meet the required alcohol-sales threshold, may qualify if the business (1) operates its own permanent food service facility with commercial cooking equipment on its premises; and (2) prepares and offers to sell multiple entrees for

consumption on or off the premises. Lastly, the commission's proposed amendments clarify various statutory terms used in the rule by adding practical examples used by the commission's license and permit holders.

Rules for events at temporary locations were adopted in late 2020 and went into effect on Sept. 1, 2021. After their adoption, commission staff noted that §§33.72 and 33.78 were overbroad. The commission proposes amendments to §§33.72 and 33.78 to narrow their applicability. Moreover, stakeholders raised concerns about the impacts of the two-day minimum duration of a temporary event authorization in certain circumstances. The commission proposes to eliminate the minimum duration.

The commission proposes new §33.80 to state clearly in rule that mixed beverage permit holders may continue to host events at temporary locations, subject to certain limitations. This is consistent with current commission policy and does not represent a change for industry members.

Amended §33.5 is proposed to become effective on January 1, 2022, concurrent with the effective date of the underlying statutory amendments. All other new and amended rules are proposed to become effective 20 days after their submission to the Texas Register for adoption.

Section by Section Discussion

§33.1 General Provisions

The commission proposes new §33.1 to provide clear rules related to submission deadlines applicable to all submissions under Chapter 33.

§33.5 Food and Beverage Certificate

The commission proposes to amend §33.5 to conform with the statutory changes made by S.B. 911 (2021 R.S.), which provides an additional mechanism to obtain a Food and Beverage Certificate, and to clarify language existing in the current rule.

§33.72 Term of Authorization; Annual Limitation on Authorizations

The commission proposes to amend §33.72 to remove the two-day minimum duration for a temporary event authorization and narrow the category of license and permit holders to whom the 10-event limit on events at a temporary location applies and clarify that a venue need not hold the Public Entertainment Facility designation to qualify for exemption.

§33.78 Nonprofit Entity Temporary Events

The commission proposes to amend §33.78 to exempt certain nonprofit auction events from the requirement to obtain commission authorization and associated late fees.

§33.80 Temporary Events Authorized under a Mixed Beverage Permit

The commission proposes new §33.80 to clarify that mixed beverage permit holders may still hold events at temporary locations under the authority of their mixed beverage permit, subject to this rule. This is not a change to the authorizations under a mixed beverage permit but is proposed to be added in rule to address confusion resulting from the implementation of other new rules related to events at temporary locations.

Fiscal Note: Costs to State and Local Government

Shana Horton, Rules Attorney, has determined that for each year of the first five years that the proposed new and amended rules

will be in effect, including proposed amendments to §33.5 necessitated by S.B. 911 (2021), they are not expected to have a significant fiscal impact upon the agency. Implementation will be performed using existing agency resources. There are no foreseeable economic implications anticipated for other units of state or local government due to the proposed new and amended rules. The rules do not impact fees or fines that can be collected by another state or local government nor do they impose additional regulatory obligations on other units of government. Implementation of changes necessitated by H.B. 1545 (2019) was previously funded by the Texas Legislature.

Rural Communities Impact Assessment

The proposed new rules and amendments will not have any material adverse fiscal or regulatory impacts on rural communities. Likewise, the proposed rules will not adversely affect a local economy in a material way. The new and amended rules apply statewide and do not impact rural communities in any manner different from urban ones or any local economy in a manner different from other local economies or the state's economy.

Small Business and Micro-Business Assessment/Flexibility Analysis

No material fiscal implications are anticipated for small or micro-businesses due to the proposed new and amended rules. Therefore, no Small Business and Micro-Business Assessment/Flexibility Analysis is required.

Takings Impact Assessment

The proposed amendments do not affect a taking of private real property, as described by Attorney General Paxton's Private Real Property Rights Preservation Act Guidelines. The rulemaking would impose no burdens on private real property because it neither relates to, nor has any impact on, the use or enjoyment of private real property and there is no reduction in value of property as a result of this rulemaking.

Public Benefits and Costs

Ms. Horton has determined that for each year of the first five years that the proposed new and amended rules would be in effect, the public would benefit from the updated rules conforming to statutory changes. Their adoption will ensure the continued funding of the activities of the commission that protect public health and safety and the Texas economy. The proposed new and amended rules would also decrease confusion and lead to greater compliance with the agency's rules. There is no increase in costs to the public.

Government Growth Impact Statement

This paragraph constitutes the commission's government growth impact statement for the proposed new and amended rules. The analysis addresses the first five years the proposed new and amended rules would be in effect. The proposed new and amended rules neither create nor eliminate a government program. They do not require the creation of new employee positions or the elimination of existing employee positions. Implementation of the proposed new and amended rules requires neither an increase nor a decrease in future legislative appropriations to the commission.

Comments on the proposed new and amended rules may be submitted in writing to Shana Horton, Rules Attorney, Texas Alcoholic Beverage Commission, at P.O. Box 13127, Austin, Texas 78711-3127, by facsimile transmission to (512) 206-3498, attention: Shana Horton, or by email to rules@tabc.texas.gov. Written

comments will be accepted for 30 days following publication in the *Texas Register*.

The staff of the commission will hold a public hearing to receive oral comments on the proposed rules on October 26, 2021, at 10:00 a.m. The commission has designated this hearing as the appropriate forum to make oral comments under Government Code §2001.029. DUE TO PUBLIC HEALTH CONCERNS RELATED TO COVID-19, THIS HEARING WILL BE HELD BY VIDEOCONFERENCE ONLY. Interested persons should visit the TABC's public website prior to the meeting date to receive further instructions or call Shana Horton, Rules Attorney, at (512) 206-3451.

SUBCHAPTER A. APPLICATIONS

16 TAC §33.1, §33.5

New §33.1 is proposed pursuant to the commission's authority §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code. Amendments to §33.5 are proposed to conform to changes to the Code made by S.B. 911 (2021), which will become effective on January 1, 2022.

The proposed new and amended rules do not impact any other current rules or statutes.

§33.1. General Provisions.

(a) When used in this chapter:

(1) the word "days" refers to calendar days, unless otherwise specified; and

(2) a "business day" is any day that is not a Saturday, a Sunday, a state or federal holiday (unless the commission is required to be open for business), or a standard Federal Reserve bank holiday.

(b) A "day" or "business day" ends at:

(1) 5:00 p.m. Central Time for submissions by hand-delivery to a commission office or by e-mail; and

(2) 11:59 p.m. Central Time for submissions through the commission's internet-based application information management system.

(c) Submissions by mail must be postmarked by the due date.

(d) When computing periods of time prescribed or allowed in subchapter D of this chapter:

(1) the day of the act, event, or default from which the designated time period begins to run is not counted; and

(2) the last day of the time period is counted, unless it is not a business day as defined by subsection (a)(2) of this section, in which case the time period will end on the next business day.

§33.5. Food and Beverage Certificate.

(a) This rule relates to §§25.13, 28.18, 32.23 and 69.16 of the Texas Alcoholic Beverage Code.

(b) The following words and terms, when used in this section, shall have the following meaning unless the context clearly indicates otherwise:

(1) Entree--[main dish or] course of a meal that may include an appetizer, small plate, main dish, dessert or other similar food item.

(2) Food service--the cooking, preparing, or assembling of food on the location available [primarily] for consumption at the location. Commercially pre-packaged items purchased off of the location

which require no cooking or assembly do not constitute food service under this section.

(3) Food service facilities--a designated permanent portion of the licensed location[; ~~including commercial cooking equipment,~~] where food is stored and prepared [~~primarily~~] for consumption at the location.

(4) Location--the designated physical address of a premises, but also including all areas at that address where the license or permit holder may sell, serve or deliver alcoholic beverages for immediate consumption at the address, regardless of whether some of those areas are occupied by other businesses, as long as those businesses are contiguous.

(5) Premises--the designated area at a location that is licensed by the commission for the sale, service, or delivery of alcoholic beverages.

(6) Restaurant--a business that:

(A) operates its own permanent food service facility with commercial cooking equipment on its premises; and

(B) prepares and offers to sell multiple entrees for consumption on or off the premises.

(c) An applicant is qualified for a food and beverage certificate if the following conditions, in addition to other requirements, are satisfied:

(1) multiple entrees are available to customers; ~~and~~

(2) permanent food service facilities are maintained at the location; ~~and~~ [-]

(3) either:

(A) the receipts from the sale of alcoholic beverages by the license or permit holder at the location are 60 percent or less of the total receipts from the location; or

(B) the facility meets the definition of Restaurant under subsection (b)(6) of this section.

(d) The hours of operation for sale and service of food and of alcoholic beverages are the same except that food may be sold or served before or after the legal hours for sale of alcoholic beverages.

(e) If the applicant is a hotel that maintains separate area restaurants, lounges or bars, food service facilities must exist for each of the designated licensed premises.

(f) An applicant for an original food and beverage certificate shall furnish the following, as well as any other information requested by the commission to ensure compliance:

(1) the menu or, if no menu is available, a listing of the food and beverage items;

(2) hours of operation of food service and hours of operation for sale or service of alcoholic beverages;

(3) if qualifying under subsection (c)(3)(A) of this section, sales data (including complimentary drinks, as recorded pursuant to subsection (k)(3) of this section) or, if not available, a projection of sales. The sales data or projection of sales should include sufficient breakdown of revenues of food, alcoholic beverages, and all other ~~major~~ sales categories at the location (e.g., tickets, merchandise, retail goods);

(4) if qualifying under subsection (c)(3)(B) of this section, a list [~~listing~~] of commercial cooking equipment used in food service; and

(5) copies of floor plans of the location indicating the licensed premises and permanent areas devoted primarily to ~~the preparation and service of~~ food service.

(g) Applicants for renewal of food and beverage certificates shall submit sales data described in subsection (k) of this section. The commission may request additional information or documentation to indicate that the licensed location has permanent food service facilities for the preparation and service of multiple entrees.

(h) The commission may review the operation at the location to determine that food service with food service facilities for the preparation and service of multiple entrees is maintained. In doing so the commission may review such items as required in the original or renewal application as well as advertising, promotional items, changes in operations or hours, changes in floor plans, prominence of food items on the menu as compared to alcoholic beverages, name of the business at the location, number of transactions with food components, copies of city or county permits or certificates relating to the type of business operation, and any other item deemed necessary or applicable.

(i) Failure to provide documentation requested or accurately maintain required records is prima facie evidence of non-compliance.

(j) In verifying that food service is being maintained at the location, the commission may examine all books, papers, records, documents, supplies and equipment of the certificate holder.

(k) The following recordkeeping requirements apply to certificate holders:

(1) records must be maintained to reflect separate totals for alcoholic beverage sales or service, food sales, and all other ~~major~~ sales categories at the location that, when combined, make up the location's total sales;

(2) purchase invoices must be maintained to reflect the total purchases of alcoholic beverages, food, and all other ~~major~~ purchase categories at the location;

(3) complimentary alcoholic beverages must be recorded and included in the total alcoholic beverage sales as if they were sold and clearly marked as being complimentary; and

(4) all records must be maintained for four years and made available to authorized representatives of the commission upon [~~reasonable~~] request.

(l) In considering alcoholic beverage sales, the dollar value of complimentary drinks shall be added to total sales or service of alcoholic beverages in determining the percentage of alcoholic beverage sales or service from [~~on~~] the licensed premises.

(m) In determining the permanent food service facilities requirement for businesses qualifying under subsection (c)(3)(B) of this section, the gross receipts of all business entities sharing the location [~~(as identified in the original or a supplemental application)]~~ will be considered. For audit purposes, it shall be the responsibility of the food and beverage certificate holder to provide financial and accounting records related to food, alcohol, and other major sales categories of all business entities sharing the location. For audit purposes, if such information that is provided is deemed insufficient to determine if a license or permit holder qualifies for issuance of a food and beverage certificate at the location, the computation and determination of the percentage of alcohol sales or service fees to total gross receipts at the licensed location may be based upon any available records of information.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Shana Horton

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SUBCHAPTER E. EVENTS AT A TEMPORARY LOCATION

16 TAC §§33.72, 33.78, 33.80

Amendments to §§33.72 and 33.78 and new 33.80 are proposed pursuant to Alcoholic Beverage Code §§16.12(c), 25.15(c), 28.19(c), 30.08, 32.25(d), and 69.18(c), as amended effective September 1, 2021; and under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new and amended rules do not impact any other current rules or statutes.

§33.72. *Term of Authorization; Annual Limitation on Authorizations.*

~~(a)~~ All event authorizations shall be effective for a minimum of two consecutive days.]

(a) ~~[(b)]~~ Temporary Event Approvals and File and Use Notifications shall be effective for no more than four consecutive days.

(b) [e] A person or entity may use a Temporary Event Approval or File and Use Notification at the same location for no more than ten events in a calendar year if the person or entity that will hold the authorization has an ownership interest in the real property or a portion of it or has a lease for its use of the location. For purposes of this rule, a lease is defined as a contractual agreement by which one party conveys an estate in property to another party, for a limited period, subject to conditions, in exchange for something of value, but retains ownership. The ten-event limitation does not apply to a location that meets the definition of a Public Entertainment Facility in Alcoholic Beverage Code §108.73, regardless of whether it holds that designation.

(c) ~~[(d)]~~ A Nonprofit Entity Temporary Event Permit shall be effective for no more than ten consecutive days unless the executive director or the executive director's designated representative, on the basis of a case-by-case review of the specific situation, grants additional time.

(d) ~~[(e)]~~ Upon written request, the executive director or the executive director's designated representative may make an exception to the limitations of subsections (a) - (c) ~~[through (d)]~~ of this section on a case-by-case basis. An exception request will be granted or denied in writing.

(e) ~~[(f)]~~ Authorization for an event under this subchapter automatically terminates upon issuance of a two-year license or permit for the event location, regardless of the term of the temporary event authorization.

(f) ~~[(g)]~~ The effective dates of an event authorization under this subchapter must cover the period in which alcoholic beverages will be delivered or stored in addition to the event itself.

(g) ~~[(h)]~~ A temporary permit or license expires on the date indicated on the license or permit or on the same date as the primary permit, whichever occurs earlier.

§33.78. *Nonprofit Entity Temporary Events.*

(a) A Nonprofit Entity Temporary Event Permit shall only be issued to a nonprofit entity as defined by Alcoholic Beverage Code §30.01.

(b) An application for a Nonprofit Entity Temporary Event Permit shall be made on forms provided by the commission and shall be signed and sworn to by the applicant.

(c) The requestor shall e-mail the completed Nonprofit Entity Temporary Event Permit application forms to the Events email address for the TABC Region in which the event will be held.

(d) The applicant shall remit payment of fees at the time the application is filed. The fee for a Nonprofit Entity Temporary Event Permit is \$50 per day.

(e) In addition to the application forms, other documents related to the event that may be required include a letter from the property owner, sponsorship agreements, promoter agreements, concession agreements, management agreements, diagrams, site maps, local governmental authorization, and any other documents needed to determine qualification under the Alcoholic Beverage Code.

(f) If the event is approved, the commission shall issue to the applicant a Nonprofit Entity Temporary Event Permit showing on its face the effective dates of the permit.

(g) Permit holders may sell any alcoholic beverage authorized by law ~~[allowed]~~ to be sold where the event is to be held.

(h) Permit holders must purchase distilled spirits for Nonprofit Entity Temporary Events from a local distributor permit holder.

(i) A nonprofit entity is not limited in the number of events it may hold under this section in a calendar year, except for certain events in dry areas as provided by Alcoholic Beverage Code §30.09.

(j) Events in dry counties must comply with Alcoholic Beverage Code §30.09.

(k) Auction-only Events.

(1) Subsections (d) - (h) of this section do not apply to a Nonprofit Temporary Event at which alcoholic beverages are auctioned but not otherwise sold or served to a consumer.

(2) Events under this subsection do not require prior approval and are not subject to late fees.

§33.80. *Temporary Events Authorized Under a Mixed Beverage Permit.*

(a) The holder of a mixed beverage permit may hold an event at a temporary location subject to all rules applicable to the mixed beverage permit.

(b) An event under this section may be authorized by a File and Use Notification if it meets the requirements of 16 TAC §33.71(a) of this subchapter, or by a Temporary Event Approval.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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TRD-202103771



CHAPTER 33. LICENSING

SUBCHAPTER D. APPLICATION REVIEW AND PROTESTS

16 TAC §33.52

The Texas Alcoholic Beverage Commission (TABC, agency, or commission) proposes the repeal of 16 Texas Administrative Code §33.52. This rule is being readopted with amendments at a different location in a separate, simultaneous rule proposal.

Background and Summary of Basis for the Proposed Rules

The agency has proposed a new rule §33.1 to contain provisions related to requirements related to timeliness of filings. Because current §33.52 is a timing-related provision, it is proposed to be incorporated into new §33.1 simultaneously with this proposal for repeal, in a separate rulemaking.

The repeal is proposed pursuant to the commission's general powers and duties under §5.31 of the Code.

Fiscal Note: Costs to State and Local Government

Shana Horton, Rules Attorney, has determined that for each year of the first five years that the proposed repeal will be in effect, it is not expected to have a significant fiscal impact upon the agency. There are no foreseeable economic implications anticipated for other units of state or local government due to the proposed repeal. The content of the repealed rule is proposed to be simultaneously reincorporated into Chapter 33 in another rule. The proposed repeal will have no impact on agency resources. The proposed repeal does not impact other units of state and local government.

Rural Communities Impact Assessment

The proposed repeal will not have any material adverse fiscal or regulatory impacts on rural communities. The repeal applies statewide and has the same effect in rural communities as in urban communities. Likewise, the proposed repeal will not adversely affect a local economy in a material way.

Small Business and Micro-Business Assessment/Flexibility Analysis

No material fiscal implications are anticipated for small or microbusinesses due to the proposed repeal. Therefore, no Small Business and Micro-Business Assessment/Flexibility Analysis is required.

Takings Impact Assessment

The proposed repeal does not affect a taking of private real property, as described by Attorney General Paxton's Private Real Property Rights Preservation Act Guidelines. The repeal would impose no burdens on private real property because it neither relates to, nor has any impact on, the use or enjoyment of private real property and there is no reduction in value of property as a result of this rulemaking.

Public Benefits and Costs

Ms. Horton has determined that for each year of the first five years that the proposed repeal would be in effect, the public would benefit from the reorganization of Chapter 33 of the commission's rules to make it more logical and concise. There is no increase in costs to the public.

Government Growth Impact Statement

This paragraph constitutes the commission's government growth impact statement for the proposed repeal. The analysis addresses the first five years the proposed repeal would be in effect. The proposed repeal neither creates nor eliminates a government program. The proposed repeal does not require the creation of new employee positions or the elimination of existing employee positions. Implementation of the proposed repeal requires neither an increase nor a decrease in future legislative appropriations to the commission. The proposed repeal is not expected to result in a significant change in fees paid to the agency. The proposed repeal is not anticipated to have any material impact on the state's overall economy.

The proposed repeal does not create any new regulations. The proposed repeal has no impact on existing regulation. The proposed repeal has no impact on the number of individuals subject to the rule's applicability.

Comments on the proposed repeal may be submitted in writing to Shana Horton, Rules Attorney, Texas Alcoholic Beverage Commission, at P.O. Box 13127, Austin, Texas 78711-3127, by facsimile transmission to (512) 206-3498, attention: Shana Horton, or by email to rules@tabc.texas.gov. Written comments will be accepted for 30 days following publication in the *Texas Register*.

The staff of the commission will hold a public hearing to receive oral comments on the proposed repeals on October 26, 2021, at 10:00 a.m. The commission has designated this hearing as the appropriate forum to make oral comments under Government Code §2001.029. DUE TO PUBLIC HEALTH CONCERNS RELATED TO COVID-19, THIS HEARING WILL BE HELD BY VIDEOCONFERENCE ONLY. Interested persons should visit the TABC's public website prior to the meeting date to receive further instructions or call Shana Horton, Rules Attorney, at (512) 206-3451.

This repeal is proposed pursuant to the commission's authority under §5.31 of the Code to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeal does not impact any other current rules or statutes.

§33.52. Computation of Time.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Shana Horton
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Texas Alcoholic Beverage Commission
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CHAPTER 35. ENFORCEMENT
SUBCHAPTER A. TRANSPORTATION OF
LIQUOR

16 TAC §§35.1 - 35.3, 35.5, 35.6

The Texas Alcoholic Beverage Commission (TABC, agency, or commission) proposes the repeal of 16 Texas Administrative Code §§35.1, 35.2, 35.3, 35.5, and 35.6. These rules are being readopted with amendments in chapter 41 of the commission's rules in a separate, simultaneous proposal.

Background and Summary of Basis for the Proposed Repeals

The commission identified these five rules in chapter 35, Enforcement, as more appropriately included in chapter 41, Auditing, due to their content. Moving the rules to a more logical chapter will assist users of the rules in locating rules that apply to their circumstances. Simultaneously with this proposal for repeal, the content of these rules is proposed to be incorporated into chapter 41 in a separate rulemaking.

The repeals are proposed pursuant to the commission's general powers and duties under §5.31 of the Code.

Fiscal Note: Costs to State and Local Government

The contents of the repealed rules are proposed to be simultaneously reincorporated into chapter 41 of the commission's rules in a separate rule proposal. Therefore, Shana Horton, Rules Attorney, has determined that for each year of the first five years that the proposed repeals will be in effect, they are not expected to have a significant fiscal impact upon the agency or its resources. Likewise, there are no foreseeable economic implications or other impacts anticipated for other units of state or local government due to the proposed repeals.

Rural Communities Impact Assessment

The contents of the repealed rules are proposed to be simultaneously reincorporated into chapter 41 of the commission's rules in a separate rule proposal. Therefore, the proposed repeals will not have any material adverse fiscal or regulatory impacts on rural communities. Likewise, the proposed repeals will not adversely affect a local economy in a material way.

Small Business and Micro-Business Assessment/Flexibility Analysis

No material fiscal implications are anticipated for small or microbusinesses due to the proposed repeals. Therefore, no Small Business and Micro-Business Assessment/Flexibility Analysis is required.

Takings Impact Assessment

The proposed repeals do not affect a taking of private real property, as described by Attorney General Paxton's Private Real Property Rights Preservation Act Guidelines. The repeals would impose no burdens on private real property because they neither relate to, nor have any impact on, the use or enjoyment of private real property and there is no reduction in value of property as a result of the repeals.

Public Benefits and Costs

Ms. Horton has determined that for each year of the first five years that the proposed repeals would be in effect, the public would benefit from the relocation of the rules to a more logical chapter to assist users of the rules in locating rules that apply to their circumstances. There is no increase in costs to the public.

Government Growth Impact Statement

This paragraph constitutes the commission's government growth impact statement for the proposed repeal. The analysis addresses the first five years the proposed repeals would be in effect. The proposed repeals neither create nor eliminate a government program. The proposed repeals do not require the creation of new employee positions or the elimination of existing employee positions. Implementation of the proposed repeals requires neither an increase nor a decrease in future legislative appropriations to the commission. The proposed repeals are not expected to result in a significant change in fees paid to the agency. The proposed repeals are not anticipated to have any material impact on the state's overall economy.

The proposed repeals do not create any new regulations and have no impact on existing regulations. The proposed repeals have no impact on the number of individuals subject to the rule's applicability.

Comments on the proposed repeals may be submitted in writing to Shana Horton, Rules Attorney, Texas Alcoholic Beverage Commission, at P.O. Box 13127, Austin, Texas 78711-3127, by facsimile transmission to (512) 206-3498, attention: Shana Horton, or by email to rules@tabc.texas.gov. Written comments will be accepted for 30 days following publication in the *Texas Register*.

The staff of the commission will hold a public hearing to receive oral comments on the proposed repeals on October 26, 2021, at 10:00 a.m. The commission has designated this hearing as the appropriate forum to make oral comments under Government Code §2001.029. DUE TO PUBLIC HEALTH CONCERNS RELATED TO COVID-19, THIS HEARING WILL BE HELD BY VIDEOCONFERENCE ONLY. Interested persons should visit the TABC's public website prior to the meeting date to receive further instructions or call Shana Horton, Rules Attorney, at (512) 206-3451.

These repeals are proposed pursuant to the commission's authority under §5.31 of the Code to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeals do not impact any other current rules or statutes.

§35.1. *Transportation of Alcoholic Beverages by Package Stores and Wine Only Package Stores.*

§35.2. *Transportation of Imported Liquor.*

§35.3. *Vehicle Identification.*

§35.5. *Private Carrier Permit Requirements.*

§35.6. *Regional Forwarding Centers.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Shana Horton

Rules Attorney

Texas Alcoholic Beverage Commission

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CHAPTER 41. AUDITING

The Texas Alcoholic Beverage Commission (TABC, agency, or commission) proposes the repeal of 16 Texas Administrative Code §§41.1 - 41.3, 41.11, 41.18, 41.19, 41.20 - 41.23, 41.25, 41.27, 41.28, 41.30 - 41.32, 41.35, 41.38, 41.39, 41.41 - 41.46, 41.49, 41.51 - 41.57, 41.61, and 41.71. This list includes all current rules in Chapter 41 except for §41.48, which is not proposed to be repealed at this time. The repeals are part of a comprehensive reorganization and streamlining of Chapter 41, Auditing.

Background and Summary of Basis for the Proposed Repeals

In a separate rulemaking, the agency is proposing new and amended rules in Chapter 41 to reflect changes made by H.B. 1545, 86th Tex. Leg. R.S. (2019) and to improve the chapter overall as a part of the agency's regular cycle of comprehensive rule review. In that rulemaking, the provisions of rules in Chapter 41 have been moved or consolidated into other rule sections within the chapter, with the following exceptions: §41.16, Industrial Permits and Local Industrial Alcohol Manufacturer's Permits is repealed because industrial permits were eliminated by the Texas Legislature in H.B. 1545; §41.27 is repealed because the wine bottler's permit was also eliminated by H.B. 1545 and the provisions for winery permit holders already exist within Chapter 16 of the Alcoholic Beverage Code; §41.30 Sale and Delivery of Ale to Retail Premises and Private Clubs is no longer necessary because of the consolidation of beer and ale into a single malt beverage category by H.B. 1545; and §41.48 Changes Relating to Control, remains unchanged and is not impacted by these proposed repeals.

The repeals are proposed pursuant to Section 410 of H.B. 1545 and the commission's general powers and duties under §5.31 of the Code.

Fiscal Note: Costs to State and Local Government

Shana Horton, Rules Attorney, has determined that for each year of the first five years that the proposed repeals will be in effect, they are not expected to have a significant fiscal impact upon the agency. There are no foreseeable economic implications anticipated for other units of state or local government due to the proposed repeals. The proposed repeals will have no impact on agency resources. The proposed repeals do not impact other units of state and local government.

Rural Communities Impact Assessment

The proposed repeals will not have any material adverse fiscal or regulatory impacts on rural communities. The repeals apply statewide and have the same effect in rural communities as in urban communities. Likewise, the proposed repeals will not adversely affect a local economy in a material way.

Small Business and Micro-Business Assessment/Flexibility Analysis

No material fiscal implications are anticipated for small or microbusinesses due to the proposed repeals. Therefore, no Small Business and Micro-Business Assessment/Flexibility Analysis is required.

Takings Impact Assessment

The proposed repeals do not affect a taking of private real property, as described by Attorney General Paxton's Private Real

Property Rights Preservation Act Guidelines. The repeals would impose no burdens on private real property because it neither relates to, nor has any impact on, the use or enjoyment of private real property and there is no reduction in value of property as a result of this rulemaking.

Public Benefits and Costs

Ms. Horton has determined that for each year of the first five years that the proposed repeals would be in effect, the public would benefit from the reorganization of Chapter 41 of the commission's rules to make it more logical and concise and to update it as necessitated by recent statutory changes. There is no increase in costs to the public.

Government Growth Impact Statement

This paragraph constitutes the commission's government growth impact statement for the proposed repeals. The analysis addresses the first five years the proposed repeals would be in effect. The proposed repeals neither create nor eliminate a government program. The proposed repeals do not require the creation of new employee positions or the elimination of existing employee positions. Implementation of the proposed repeals requires neither an increase nor a decrease in future legislative appropriations to the commission. The proposed repeals are not expected to result in a significant change in fees paid to the agency. The proposed repeals are not anticipated to have any material impact on the state's overall economy.

The proposed repeals do not create any new regulations.

Comments on the proposed repeals may be submitted in writing to Shana Horton, Rules Attorney, Texas Alcoholic Beverage Commission, at P.O. Box 13127, Austin, Texas 78711-3127, by facsimile transmission to (512) 206-3498, attention: Shana Horton, or by email to rules@tabc.texas.gov. Written comments will be accepted for 30 days following publication in the *Texas Register*.

The staff of the commission will hold a public hearing to receive oral comments on the proposed repeals on October 26, 2021, at 10:00 a.m. The commission has designated this hearing as the appropriate forum to make oral comments under Government Code §2001.029. DUE TO PUBLIC HEALTH CONCERNS RELATED TO COVID-19, THIS HEARING WILL BE HELD BY VIDEOCONFERENCE ONLY. Interested persons should visit the TABC's public website prior to the meeting date to receive further instructions or call Shana Horton, Rules Attorney, at (512) 206-3451.

SUBCHAPTER A. SALES

16 TAC §§41.1 - 41.3

The repeals are proposed pursuant Section 410 H.B. 1545, 86th Tex. Leg. R.S. (2019), which eliminated certain authorizations, and §5.31 of the Code, which authorizes the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeals do not impact any other current rules or statutes.

§41.1. *Sale to Lien Holders.*

§41.2. *Sale by Carrier.*

§41.3. *Sale after Cancellation or Expiration of License or Permit.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Shana Horton

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SUBCHAPTER B. EXPORTS OF LIQUOR

16 TAC §§41.11, 41.18, 41.19

The repeals are proposed pursuant Section 410 H.B. 1545, 86th Tex. Leg. R.S. (2019), which eliminated certain authorizations, and §5.31 of the Code, which authorizes the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeals do not impact any other current rules or statutes.

§41.11. *Record Requirements.*

§41.18. *Providing Retailer Samples: Distiller's and Rectifier's Permit.*

§41.19. *Providing Retailer Samples: Non-Resident Seller.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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SUBCHAPTER C. RECORDS AND REPORTS BY LICENSEES AND PERMITTEES

16 TAC §§41.20 - 41.23, 41.25, 41.27, 41.28, 41.30 - 41.32, 41.35, 41.38, 41.39, 41.41 - 41.46, 41.49, 41.51 - 41.57

The repeals are proposed pursuant Section 410 H.B. 1545, 86th Tex. Leg. R.S. (2019), which eliminated certain authorizations, and §5.31 of the Code, which authorizes the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeals do not impact any other current rules or statutes.

§41.20. *Timely Filing of Reports.*

§41.21. *Industrial Permits and Local Industrial Alcohol Manufacturer's Permits.*

§41.22. *Compliance Reporting by License and Permit Holders.*

§41.23. *Basic General Records Required.*

§41.25. *Records and Invoice Requirements.*

§41.27. *Wine Processing.*

§41.28. *Sale and Delivery of Beer to Retail Premises and Private Clubs.*

§41.30. *Sale and Delivery of Ale to Retail Premises and Private Clubs.*

§41.31. *Excise Tax.*

§41.32. *Monthly Report of Distilled Spirits, Wines, Ale and Malt Liqueur, and Beer.*

§41.35. *Bottling Record.*

§41.38. *Carrier Report.*

§41.39. *Bonded Warehouse Report.*

§41.41. *Nonresident Seller's Report.*

§41.42. *Amount of Excise Tax Bonds.*

§41.43. *Required Signature.*

§41.44. *Report Retention.*

§41.45. *Failure to make Reports and Records.*

§41.46. *Nonresident Manufacturer's Report.*

§41.49. *Private Clubs--Temporary Memberships.*

§41.51. *Private Clubs--Purchases--Pool Systems.*

§41.52. *Private Clubs--In General.*

§41.53. *Required Records for Brewpubs.*

§41.54. *Destructions.*

§41.55. *Malt Beverages for Export.*

§41.56. *Out-Of-State Winery Direct Shipper's Permits.*

§41.57. *Warehouse Registration.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Rules Attorney

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SUBCHAPTER D. SACRAMENTAL WINE

16 TAC §41.61

The repeals are proposed pursuant Section 410 H.B. 1545, 86th Tex. Leg. R.S. (2019), which eliminated certain authorizations, and §5.31 of the Code, which authorizes the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeals do not impact any other current rules or statutes.

§41.61. *Permission and Reports.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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SUBCHAPTER E. IDENTIFICATION STAMPS

16 TAC §41.71

The repeals are proposed pursuant Section 410 H.B. 1545, 86th Tex. Leg. R.S. (2019), which eliminated certain authorizations, and §5.31 of the Code, which authorizes the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed repeals do not impact any other current rules or statutes.

§41.71. Identification Stamps and Local Distributor's Records.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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CHAPTER 41. AUDITING

The Texas Alcoholic Beverage Commission (TABC, agency, or commission) proposes new Chapter 41, Auditing, §§41.1 - 41.6; 41.11 - 41.26; 41.30 - 41.40; 41.41 - 41.43; 41.50 - 41.56; and 41.60. The repeal of all but one of the rules comprising current Chapter 41 is proposed in a separate, simultaneous proposal.

Background and Summary

The agency proposes new Chapter 41 of the agency's rules as the result of a comprehensive review of the chapter pursuant to the regular four-year review cycle prescribed by Government Code §2001.039, as well as to conform its rules to statutory changes made by House Bill 1545 (86th Tex. Leg. R.S. (2019)) and add a definition of "tamper-proof container" as authorized by statutory changes made by House Bill 1024 (87th Tex. Leg. R.S. (2021)). Due to extensive rearrangement of the chapter, only one rule retained its original rule number (§41.48). With that exception, the agency proposes to repeal the rules in current Chapter 41 and adopt these proposed rules to replace them.

The rules are proposed pursuant to Section 410 of H.B. 1545 (2019); §§28.1001(a)(2)(C) and 32.155(a)(2) of the Alcoholic Beverage Code (the "Code"); and the commission's general powers and duties under §5.31 of the Code.

Section by Section Discussion

§41.1 Scope and Applicability

The commission proposes new §41.1 to state who is subject to the rules in Chapter 41 and the statutory basis for the rules, consistent with other chapters of the agency's rules.

§41.2 Timely Filing of Reports

The commission proposes new §41.2 to relocate current §41.20 to the beginning of the chapter, consistent with the placement of generally applicable rules in other agency rule chapters.

§41.3 Required Signature

The commission proposes new §41.3 to relocate current §41.43 to the beginning of the chapter, consistent with the placement of generally applicable rules in other agency rule chapters.

§41.4 Report and Record Retention

The commission proposes new §41.4 to relocate and consolidate current §§41.44 and 41.25(d) at the beginning of the chapter, consistent with the placement of generally applicable rules in other agency rule chapters.

§41.5 Records and Invoice Requirements

The commission proposes new §41.5 to relocate current §41.25 to the beginning of the chapter, consistent with the placement of generally applicable rules in other agency rule chapters.

§41.6 Failure to Make Reports and Records

The commission proposes new §41.6 to relocate current §41.23 to the beginning of the chapter, consistent with the placement of generally applicable rules in other agency rule chapters.

§41.11 Basic General Records Required

The commission proposes new §41.11 to relocate current §41.45 to a more logical location at the beginning of new Subchapter B, Recordkeeping and Reports, and to provide a requirement for receipt retention by license and permit holders selling alcoholic beverages to-go under Alcoholic Beverage Code Chapter 28 or 32 that is consistent with the requirement for holders of consumer delivery permits.

§41.12 Compliance Reporting by License and Permit Holders

The commission proposes new §41.12 to relocate current §41.22 to a more logical position in the reorganized chapter, with other generally applicable rules.

§41.13 Carrier Report

The commission proposes new §41.13 to relocate current §41.38 to a more logical position in the reorganized chapter and eliminate a duplicative subsection.

§41.14 Transfer of Alcoholic Beverages by Package Stores and Wine-Only Package Stores

The commission proposes new §41.14 to relocate the rule from §35.1 of the commission's rules for a more logical and intuitive placement in the Auditing rule chapter, rather than the Enforcement rule chapter, and to make other non-substantive changes.

§41.15 Transportation of Imported Alcoholic Beverages

The commission proposes new §41.15 to relocate this rule from §35.2 of the commission's rules for a more logical and intuitive placement in the Auditing rule chapter, rather than the Enforcement rule chapter, and to make other non-substantive changes.

§41.16 Tamper-proof Containers

The commission proposes new §41.16 to implement §§28.1001(a)(2)(C) and 32.155(a)(2) of the Code, pursuant to House Bill 1024 (87th Tex. Leg. R.S. (2021)), by providing in rule approved types of tamper-proof containers and clarifying that some common sealing methods do not comply with the statutes and rule.

§41.17 Vehicle Identification and Liability

The commission proposes new §41.17 to reorganize provisions of current §§35.3 and 35.5 of the commission's rules and relocate them for a more logical and intuitive placement in the Auditing rule chapter, rather than the Enforcement rule chapter, and to other make non-substantive changes to conform to H.B. 1545 (2019).

§41.18 Regional Forwarding Centers

The commission proposes new §41.18 to relocate §35.6 of the commission's rules for a more logical and intuitive placement in the Auditing rule chapter, rather than the Enforcement rule chapter, and to other make non-substantive changes.

§41.19 Warehouse Registration

The commission proposes new §41.19 to relocate current §41.57 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.20 Bonded Warehouse Report

The commission proposes new §41.20 relocate current §41.39 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.21 Record Requirements: Export

The commission proposes new §41.21 to consolidate current §§41.11 and 41.55 and locate the consolidated rules in a more logical position in the reorganized chapter, adjacent to similar and/or related rules, as well as to update Code references to conform to statutory changes made by H.B. 1545 (2019).

§41.22 Sale and Delivery of Malt Beverages to Retail Premises and Private Clubs

The commission proposes new §41.22 to consolidate current §§41.28 and 41.30, pursuant to the legislature's consolidation of beer and ale into a single malt beverage category under H.B.1545 (2019), and to locate the consolidated rule in a logical position in the reorganized chapter.

§41.23 Providing Retailer Samples: Nonresident Seller

The commission proposes new §41.23 to relocate current §41.19 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.24 Providing Retailer Samples: Distiller's and Rectifier's Permit

The commission proposes new §41.24 to relocate current §41.18 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.25 Nonresident Seller's Report

The commission proposes new §41.25 to relocate current §41.41 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.26 Nonresident Brewer's Report

The commission proposes new §41.26 to relocate current §41.46 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.30 Excise Tax

The commission proposes new §41.30 to relocate current §41.31 to be the top-most rule in new subchapter C, Excise Taxes.

§41.31 Monthly Report of Distilled Spirits, Wines, and Malt Beverages

The commission proposes new §41.31 to relocate current §41.32 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.32 Out-Of-State Winery Direct Shipper's Permits

The commission proposes new §41.32 to relocate current §41.56 to a more logical position in the reorganized chapter, adjacent to similar and/or related rules.

§41.33 Excise Tax Exemptions

The commission proposes new §41.33 to contain a concise, comprehensive list of transactions exempt from excise taxes, including exemptions contained in current rules §§41.54 and 41.61.

§41.34 Sacramental Wine

The commission proposes new §41.34 to contain the requirements that must be met for the excise tax exemption for sacramental wine, currently in §41.61 of the commission's rules, and locate it adjacent to other excise tax exemption rules.

§41.35 Export of Alcoholic Beverages

The commission proposes new §41.35 to contain the requirements of current §41.11 for excise tax exemption for export of alcoholic beverages; locate it adjacent to other excise tax exemption rules; clarify that the rule applies to all types of alcohol; and remove references to permits eliminated by H.B. 1545 (2019).

§41.36 Export of Malt Beverages Not Legal for Sale

The commission proposes new §41.36 to contain the requirements that must be met for the excise tax exemption for the out-of-state sale of malt beverages not legal for sale in the state of Texas, currently in §41.55 of the commission's rules; to locate it adjacent to other excise tax exemption rules; and to update the rule to consolidate beer and ale into a single malt beverage category pursuant to H.B. 1545 (2019).

§41.37 Destructions

The commission proposes new §41.37 to contain the requirements that must be met for the excise tax exemption for alcoholic beverages that are destroyed, currently in §41.54 of the commission's rules, and locate it adjacent to other excise tax exemption rules.

§41.38 Production Record

The commission proposes new §41.38 to contain the provisions of current §41.35, updated to refer to all production forms to which it applies (including kegs, cans, etc.) rather than only bottling and to make additional non-substantive changes for clarity.

§41.39 Amount of Excise Tax Bonds

The commission proposes new §41.39 to relocate current §41.42 so that it is adjacent to other excise tax-related rules.

§41.40 Required Records for Brewpubs

The commission proposes new §41.40 to relocate current §41.53 adjacent to other similar and/or related rules.

§41.41 Sale to and by Lien Holders

The commission proposes new §41.41 to relocate current §41.1 to a more appropriate location within the chapter, under a new subchapter for sales of alcoholic beverages not in the regular course of business.

§41.42 Sale by Carrier

The commission proposes new §41.42 to relocate current §41.2 to a more appropriate location within the chapter, adjacent to other similar and/or related rules.

§41.43 Sale after Cancellation, Expiration, or Voluntary Suspension of License or Permit

The commission proposes new §41.43 to relocate current §41.3 to a more appropriate location within the chapter, adjacent to other similar and/or related rules.

§41.50 General Provisions

The commission proposes new §41.50 to contain provisions generally applicable to private clubs, including definitions and authorization for digital recordkeeping, and be the top-most rule in new subchapter E, Private Clubs.

§41.51 Requirements for Permit; Membership

The commission proposes new §41.51 to contain requirements for obtaining a private club registration permit and provisions generally applicable to holders of private club registration permits previously in §41.52.

§41.52 Temporary Memberships

The commission proposes new §41.52 to contain requirements for the holder of a private club registration permit related to temporary memberships, currently contained in §41.49, and to make non-substantive revisions for style, brevity, and clarity.

§41.53 Pool Systems

The commission proposes new §41.53 to contain requirements for the use of pool systems for the purchase and replacement of alcoholic beverages at a private club, currently contained in §41.51.

§41.54 Locker Systems

The commission proposes new §41.54 to provide a rule specific to the use of locker systems used by members of private clubs to store alcoholic beverages for on-premises consumption. Subsection (c) contains the portion of current rule §41.51 pertaining to locker systems. The rule also provides statutory authority, conforming with the format of other commission rules; a general authorization for the use of lockers; the method for collection of taxes on alcoholic beverages in locker systems and related recordkeeping requirements; and the statutory prohibition on removal of the alcoholic beverages from the premises.

§41.55 Food Service

The commission proposes new §41.55 to contain the food service-related provisions from current §41.51, making the provisions easier to find in their own, descriptively titled rule.

§41.56 Enforcement

The commission proposes new §41.56 to outline the executive director's options for enforcement of rules applicable to private club registration permits, currently contained in §41.51, as well as other reasons for enforcement as authorized by statute.

§41.60 Identification Stamps and Local Distributor's Records

The commission proposes new §41.60 to move current rule §41.71 to its own subchapter, Identification Stamps, to assist rule users in locating the rule.

Fiscal Note: Costs to State and Local Government

Shana Horton, Rules Attorney, has determined that for each year of the first five years that the proposed rules will be in effect, they are not expected to have a significant fiscal impact upon the agency. There are no foreseeable economic implications anticipated for other units of state or local government due to the proposed rules. The vast majority of the proposed new rules are current rules that have been rearranged and/or consolidated for efficiency, edited for clarity, grammar, internal consistency, and conciseness, and/or updated as required by the legislature to conform to changes to license and permit types and the consolidation of beer and ale under H.B. 1545 (2019). In addition, new §41.16 provides a detailed definition of what qualifies as a tamper-proof container, as authorized by statute.

Enforcing or administering the new rules does not have foreseeable implications relating to cost or revenues of state or local governments. Because the proposed rules are largely non-substantive, they are not expected to have a significant fiscal impact upon the agency, which will be able to administer the rules using existing agency resources. Moreover, none of the rules are anticipated to cause the agency to collect more in either permitting fees or enforcement fines. On their face, the proposed rules do not impact other units of state and local government, therefore there are no foreseeable economic implications anticipated for other units of state or local government due to the proposed rules.

Rural Communities Impact Assessment

The proposed rules will not have any material adverse fiscal or regulatory impacts on rural communities. The rules apply statewide and have the same effect in rural communities as in urban communities. Likewise, the proposed rules will not adversely affect a local economy in a material way.

Small Business and Micro-Business Assessment/Flexibility Analysis

Because the proposed new rules are largely relocated versions of existing rule provisions revised for style and clarity and conformity with statutory changes made by H.B. 1545 (2019), they are not expected to have adverse economic impacts on small businesses, micro-businesses, or rural communities.

Most of the revisions to existing rules are required by the legislature under H.B. 1545 (2019), limiting the commission's flexibility with respect to their adoption. Where possible, the proposed rules mitigate impacts on small and micro-businesses.

None of the other proposed rules have material fiscal impacts.

Takings Impact Assessment

The proposed rules do not affect a taking of private real property, as described by Attorney General Paxton's Private Real Property Rights Preservation Act Guidelines. The rulemaking would

impose no burdens on private real property because it neither relates to, nor has any impact on, the use or enjoyment of private real property and there is no reduction in value of property as a result of this rulemaking.

Public Benefits and Costs

Ms. Horton has determined that for each year of the first five years that the rules would be in effect, the public would benefit from the new rules in the following ways:

Non-substantive changes that make the rules better organized, clearer, and more internally consistent will make the rules easier to navigate and understand. There are no direct costs to the public as a result of these improvements.

There are no direct public costs as a result of the adoption of new §41.54, providing regulations pertaining to the use of locker systems at private clubs. Locker systems are not common, and the proposed rules reflect how the agency currently regulates them. The public benefits from the transparency and clarity of a formal rule for locker systems.

The public costs and benefits of changes necessitated by H.B. 1545 (2019) and new rule §41.16 were already considered by the Texas legislature when it adopted the underlying legislation.

Government Growth Impact Statement

This paragraph constitutes the commission's government growth impact statement for the proposed rules. The analysis addresses the first five years the proposed rules would be in effect. The proposed rules neither create nor eliminate a government program. The proposed rules do not require the creation of new employee positions or the elimination of existing employee positions. Implementation of the proposed rules requires neither an increase nor a decrease in future legislative appropriations to the commission. The proposed rules are not expected to result in a significant change in fees paid to the agency. The proposed rules are not anticipated to have any material impact on the state's overall economy.

The proposed rules do not create any new regulations except proposed new §41.54. As proposed, §41.54 reflects current agency and industry practices regarding locker systems, which are not in widespread use. Other proposed rules do not expand the applicability of any rules or increase the number of individuals subject to existing rules' applicability beyond current rule requirements.

Comments on the proposed rules may be submitted in writing to Shana Horton, Rules Attorney, Texas Alcoholic Beverage Commission, at P.O. Box 13127, Austin, Texas 78711-3127, by facsimile transmission to (512) 206-3498, attention: Shana Horton, or by email to rules@tabc.texas.gov. Written comments will be accepted for 30 days following publication in the *Texas Register*.

The staff of the commission will hold a public hearing to receive oral comments on the proposed rules on October 26, 2021, at 10:00 a.m. The commission has designated this hearing as the appropriate forum to make oral comments under Government Code §2001.029. DUE TO PUBLIC HEALTH CONCERNS RELATED TO COVID-19, THIS HEARING WILL BE HELD BY VIDEOCONFERENCE ONLY. Interested persons should visit the TABC's public website prior to the meeting date to receive further instructions or call Shana Horton, Rules Attorney, at (512) 206-3451.

SUBCHAPTER A. GENERAL PROVISIONS

16 TAC §§41.1 - 41.6

New §41.1 - 41.6 are proposed pursuant to the commission's authority under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new rules require the repeal of current §§41.1 - 41.3.

§41.1. Scope & Applicability.

(a) This chapter relates to and implements chapters 201, 202, and 203 of the Alcoholic Beverage Code.

(b) The rules in this chapter apply to regulated entities required to keep records and/or file reports for taxation purposes.

§41.2. Timely Filing of Reports.

With respect to all tax reports required under the Texas Alcoholic Beverage Code, Chapter 201, or this chapter, it is a violation of this rule if a report or a payment is not received or postmarked by 11:59 p.m. on the date that it is due.

§41.3. Required Signature.

Each report required by this chapter shall be signed and affirmed to be true and correct by the permittee or licensee or a duly authorized representative.

§41.4. Report and Record Retention.

(a) The license or permit holder must keep all records required by the Alcoholic Beverage Code or by rule and an exact copy of each report required by this chapter for a period of at least two years, unless a different period is specified in the Alcoholic Beverage Code or in another rule.

(b) The license or permit holder must keep all records and reports available for inspection by the commission or its authorized representatives during reasonable office hours.

§41.5. Records and Invoice Requirements.

(a) An invoice that is required by the Alcoholic Beverage Code or by rule for any alcoholic beverage must have the exact trade name and license or permit number of the issuing licensee or permittee and the receiving licensee or permittee, if any.

(b) A licensee or permittee who owns more than one business operating under separate licenses or permits or a single business operating at two or more locations under separate licenses or permits shall keep separate records for each such business or place of business.

(c) Each licensee or permittee who is also engaged in any other kind of business shall make and keep all records for the alcoholic beverage business that are required by the Alcoholic Beverage Code or by rule separate and apart from any and all other records.

(d) Making a false entry or any alteration in records that are required by the Alcoholic Beverage Code or by rule is a violation of this section.

§41.6. Failure to Make Reports and Records.

Failing to make any record or report required by this chapter, or failing to make any entry or entries on any record or report required by this chapter at the time or in the place or manner required, is a violation of this section.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103775

Shana Horton

Rules Attorney

Texas Alcoholic Beverage Commission

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 206-3451



SUBCHAPTER B. RECORDKEEPING AND REPORTS

16 TAC §§41.11 - 41.26

New §§41.11 - 41.26 are proposed pursuant to the commission's authority under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new rules require the repeal of current §§41.11, 41.18 - 41.23, and 41.25.

§41.11. Basic General Records Required.

(a) Except as provided by subsections (b) and (c) of this section, a brewer, distiller, winery, rectifier, wholesaler, Class B wholesaler, package store, brewpub, or distributor must keep at each place of business, for a period of two years, for inspection at all times by the commission or its authorized representatives:

(1) a complete record of all alcoholic beverages manufactured, distilled, sold, purchased, received, blended, or bottled, including all invoices, bills of lading, way bills, freight bills, express receipts, and all other shipping records furnished by the carrier and the seller or shipper of the alcoholic beverages, including, at a minimum:

(A) the name and address of the person from whom alcoholic beverages were purchased;

(B) the name and address of the person receiving alcoholic beverages;

(C) the address from which the alcoholic beverages were shipped or delivered;

(D) the address at which the alcoholic beverages were received;

(E) the quantity and kind of alcoholic beverage received; and

(F) except as provided in subsection (b) of this section, inventories on the last day of each month, showing the quantities, sizes, brands, and taxable class of beverages on hand; and

(2) a complete record of each sale or distribution of alcoholic beverages, upon an invoice to be furnished by the licensee or permittee.

(b) Package store permittees are not required to keep inventories of alcoholic beverages on hand on the last day of each month under subsection (a)(1)(F) of this section.

(c) Wine and malt beverage retailers are required to keep the records required by subsection (a) of this section only as to wine purchases.

(d) Invoices must:

(1) be printed, numbered, and issued in consecutive order;

(2) show the date of sale or distribution, the purchaser's tradename, purchaser's license or permit number, purchaser's address, the means of delivery, the name and permit number of the carrier (if delivered by common carrier), and the quantity, price, container size and brand name of alcoholic beverages sold;

(3) be supported by the receipts or other records furnished by the carrier of such alcoholic beverages; and

(4) include the alcohol percentage by volume or an approved symbol or statement in the product description for malt beverages.

(e) The licensee or permittee making the sale shall keep each invoice or a copy thereof and shall deliver an invoice to the purchaser.

(f) Each purchaser and seller of tax-free alcohol shall keep for inspection of the commission or its authorized representatives all invoices of tax-free alcohol for a period of at least two years.

(g) License and permit holders selling alcoholic beverages to-go under Alcoholic Beverage Code Chapter 28 or 32 shall maintain receipts for those sales for a period of at least six months.

§41.12. Compliance Reporting by License and Permit Holders.

(a) This rule implements Alcoholic Beverage Code §§5.31 and 5.361. The purpose of this rule is to allow the commission to better leverage resources in meeting its charge to inspect, supervise, and regulate members of the alcoholic beverage industry; reduce unnecessary physical inspections of industry locations; and use automation to better and more efficiently protect public safety and serve the alcoholic beverage industry.

(b) Each permittee and licensee must prepare and file an automated compliance report with the commission as instructed by the commission. The commission may require that the report be filed using a specified digital application.

(c) The commission will annually notify each permittee and licensee of the requirement to file its compliance report. The license or permit holder will have 90 days from the date of notification to file the report.

(d) The commission may issue a written warning to a permittee or licensee who fails to file the mandated compliance report within 90 days of being notified by the commission. The commission may initiate an administrative case to cancel or suspend the license or permit of any permittee or licensee who does not file the compliance report within 30 days following issuance of the written warning.

§41.13. Carrier Report.

(a) Each holder of a carrier permit under Chapter 41 of the Alcoholic Beverage Code shall make a monthly report to the commission on forms prescribed by the executive director.

(b) The permittee shall file the report with the commission on or before the 15th day of the month following the calendar month for which the report is made.

(c) The report shall give an accurate account of all liquor, wine, and malt beverages transported by the carrier in interstate commerce during the month for which the report is made, and shall state the date of shipment, consignor, point of origin, consignee, destination, freight bill number, number of packages, kind of commodity shipped, and the date of delivery, and shall give all information requested by the form. If no shipments were transported, the permittee shall submit a report stating so.

§41.14. Transfer of Alcoholic Beverages by Package Stores and Wine-Only Package Stores.

(a) This rule relates to transportation of alcoholic beverages under the authority of §§22.08, 23.04 or 24.04 of the Alcoholic Beverage Code.

(b) Only a holder of a package store permit, wine-only package store permit, local distributor's permit, or a carrier's permit may transport alcoholic beverages under the authority of §§22.08, 23.04 or 24.04 of the Alcoholic Beverage Code.

(c) Package stores and wine only package store permittees transporting shipments of alcoholic beverages governed by this rule to a permitted location shall prepare an invoice in duplicate. The invoice shall show:

(1) the date of the shipment;

(2) the quantity, container size and brands of alcoholic beverages shipped, and if sold, a price extension for each line item listed on the invoice; and

(3) the store name and address of the origination and destination point of the shipment.

(d) The purchaser must sign the invoice acknowledging receipt of the alcoholic beverages.

(e) The original of the invoice mandated by this rule shall be maintained at the originating store for two years after the date of shipment. The copy of the invoice shall accompany the shipment and be maintained at the receiving store for two years after the date of shipment.

(f) Shipments of alcoholic beverages governed by this rule may not be transported outside the county in which the shipment originated and must be transported by the most direct practical route from point of origination to point of destination.

(g) Shipments made by local distributor permittees under the authority of §23.04 of the Alcoholic Beverage Code are subject to the restrictions expressed in §102.56(d) of the code.

§41.15. Transportation of Imported Alcoholic Beverages.

(a) This rule relates to alcoholic beverages imported into the state under the authority of §§14.071, 16.10, 19.06, 20.04, 41.01(a), 62.15, 63.01, 64.10, and 66.01 of the Alcoholic Beverage Code.

(b) Alcoholic beverages imported into the state for resale may only be transported by the holder of a license or permit authorizing transport or a carrier's permit. Shipments of alcoholic beverages into the state must be accompanied by an invoice.

(c) Nonresident sellers shipping alcoholic beverages for importation to any class of licensees or permittees shall cause the invoice covering that shipment of alcoholic beverages to show delivery to the authorized license or permit holder.

(d) All license and permit holders subject to this section shall transport alcoholic beverages by the most direct route practical to the place of destination.

§41.16. Tamper-proof Containers.

(a) This rule relates to Alcoholic Beverage Code §§28.1001 and 32.155.

(b) A "tamper-proof container" means a container that, once sealed, clearly shows whether it has been opened. The term includes a closed cup or similar container that is:

(1) placed into a bag that has been sealed with a zip tie or staple;

(2) sealed with shrink wrap or a similar seal;

(3) sealed with a tamper-evident adhesive tape or seal having one or more indicators or barriers to entry which, if breached or missing, can reasonably be expected to provide visible evidence that tampering has occurred; or

(4) sealed mechanically on-premises with a can seamer.

(c) The following sealing methods, unless used in combination with a method described in subsection (b) of this section, are not sufficient to meet the standard for a tamper-proof container:

(1) freezing the beverage, putting a lid on it, and leaving the straw out of the lid's straw hole; and

(2) sealing with a sticker or adhesive tape that is not tamper-evident.

(d) The list in subsection (c) of this section is non-exclusive.

§41.17. Vehicle Identification and Liability.

(a) This rule applies to vehicles used in the alcoholic beverage business by license and permit holders operating under the authority of §§ 14.071, 19.06, 20.04, 22.08, 24.04, 62.15, or 64.10 of the Alcoholic Beverage Code.

(b) Each vehicle subject to this section shall have the correct TABC license or permit number painted or printed or attached in a conspicuous place on the vehicle, with each character being not less than 1.5 inches in height. These characters shall never be covered from public view when the vehicle is being used in the alcoholic beverage business.

(c) For each vehicle subject to this section, the license or permit holder shall carry at least \$500,000 of liability insurance for bodily injury and property damage covering every registered vehicle whose gross weight, registered weight or gross-weight rating exceeds 26,000 pounds.

(d) For each vehicle subject to this section or operating pursuant to §16.10 of the Alcoholic Beverage Code, the license or permit holder shall file with the commission an affidavit stating that the license or permit holder has knowledge of, and will conduct operations in accordance with, all federal and state safety regulations, and that it is in compliance with the requirements for insurance coverage under this section.

(e) For each vehicle subject to this section, the license or permit holder shall maintain proof of insurance in the licensed or permitted vehicle at all times.

§41.18. Regional Forwarding Centers.

(a) This rule relates to Alcoholic Beverage Code, §§37.01(a)(2), 62.08, and 63.01.

(b) Members of the manufacturing tier transporting alcoholic beverages into the state, or from point to point within the state under the authority of Alcoholic Beverage Code §§37.01(a)(2), 62.08(a), or 63.01 may temporarily hold such alcoholic beverages in a regional forwarding center, subject to the following conditions:

(1) A regional forwarding center is a facility wherein alcoholic beverages may be held under the control of the manufacturing tier member responsible for shipping the alcoholic beverages.

(2) The regional forwarding center may be operated by a third party who acts as the agent of the manufacturing tier member in arranging for interstate or intrastate shipments of alcoholic beverages to licensees and permittees authorized to receive such beverages or for shipment to locations outside the state.

(3) No member of the wholesale or retail tiers of the alcoholic beverage industry may, directly or indirectly, hold any interest in, or right of operation of a regional forwarding center.

(4) No alcoholic beverages may be sold to a person or entity from a regional forwarding center. For purposes of this rule, a "sale" occurs when an order is taken and/or payment is made.

(5) No member of the retail tier may take delivery of alcoholic beverages at a regional forwarding center.

(6) A regional forwarding center must be located in an area that is wet for the type of alcoholic beverages held therein.

(7) A licensee or permittee, by using a regional forwarding center under the authority of this rule, consents to inspection of such facility by the commission, its agents or employees, or any peace officer, to the same extent as consent is given for inspection of licensed premises by §101.04 of the Alcoholic Beverage Code.

(c) Licensees and permittees using regional forwarding centers under the authority of this rule shall maintain a record at the regional forwarding center with information relating to specific shipments entered into the record on the day the shipment is received or sent. The record shall show the:

(1) invoice number for each receipt and transfer;

(2) date for each receipt and transfer;

(3) point of origin for each receipt;

(4) destination (name and address) for each transfer;

(5) type of alcoholic beverages and total gallons for each receipt and transfer; and

(6) name of the carrier making delivery and transfer, and its TABC license or permit number if one is required by the Alcoholic Beverage Code.

(d) Licensees and permittees using regional forwarding centers under the authority of this rule shall pay an annual fee to the commission pursuant to §33.23 of this title.

(e) All records required by this section shall be kept for at least two years.

§41.19. Warehouse Registration.

(a) Licensees required by Code §62.08 to register a warehouse with the Commission shall provide the warehouse's address and all other information required on a form prescribed by the Commission. Should any information required by the form change, a licensee is required to submit a new form reflecting those changes within 30 days. A licensee may not operate a warehouse until the registration form is received by the Commission's Licensing Division.

(b) A registered warehouse is a place of business of the license holder for purposes of §§41.5 and 41.11 of this title.

§41.20. Bonded Warehouse Report.

(a) Each holder of a bonded warehouse permit shall make a monthly report to the commission on forms prescribed by the executive director.

(b) The report shall:

(1) state the name, address, and permit number of the warehouse;

(2) state the name, address, and permit number of each customer storing liquor;

(3) show monthly opening inventory receipts, withdrawals and closing inventory in gallons for each class of liquor;

(4) affirm that the permittee is in compliance with Alcoholic Beverage Code §46.03, which requires the holder of a bonded warehouse permit to derive at least 50 percent of its gross revenue in a bona fide manner during each three month period from the storage of goods or merchandise other than liquor; and

(5) be signed by the custodian of the bonded warehouse.

(c) Reports shall be filed with the commission on or before the 15th day of the month following the calendar month for which the report is made.

(d) A holder of a bonded warehouse permit may only store or offer to store liquor in full and unbroken case lots.

(e) Except as provided in this subsection, a holder of a bonded warehouse permit may only allow the withdrawal of liquor in full and unbroken case lots. When actual breakage occurs in a bonded warehouse which results in actual loss, the holder of a bonded warehouse permit may allow withdrawal in partial or broken case lots if the bonded warehouse permit holder executes duplicate affidavits documenting the actual breakage. The bonded warehouse permit holder shall retain one such affidavit shall be on file, and permittee shall submit the other affidavit with the monthly report required by this section.

§41.21. Record Requirements: Export.

(a) This rule relates to Alcoholic Beverage Code §§ 14.01, 16.01, 19.01, 20.01, 62.01, 62.09, 64.09, 66.11, and 74.08.

(b) No person shall export any distilled spirits or wines in any manner except in compliance with the following:

(1) Permittees authorized to export distilled spirits and wines shall maintain copies of billing invoices and shipping documents to support any export out of the State of Texas. Supporting documentation shall include an order signed by the purchaser of the distilled spirits or wines or, in case of return to a distillery or winery, a letter of authority.

(2) The distilled spirits or wines may then be delivered to a common carrier holding a carrier's permit, or if the permittee is authorized under its permit to transport distilled spirits or wines in vehicles owned or leased by the permittee, such distilled spirits or wines may be transported and exported in vehicles registered with the commission by the permittee.

(3) A license or permit holder exporting under this section must obtain proper proof from the purchaser that the distilled spirits or wine was sold or disposed of outside of this state and keep such records on file for inspection or audit by any representative of the commission for at least two years.

§41.22. Sale and Delivery of Malt Beverages to Retail Premises and Private Clubs.

(a) Malt beverages intended to be delivered in sales transactions consummated at a licensed retailer's place of business or at a private club located in a wet area may be transported through dry areas in vehicles owned or leased and operated by one of these authorized sellers, who are authorized to sell to retailers or private clubs located in wet areas: the holder of a brewer's self-distribution license; the holder of any type of distributor license; or the holder of a brewpub license. The person directly in charge of the vehicle used in such transportation must possess a written statement furnished and signed by the authorized seller showing the quantity of malt beverages so delivered to such person, the origin thereof, and the fact that said malt beverage is intended

for delivery only upon any sale that may be consummated by such person acting as agent for the authorized seller at the place of business of a licensed retail dealer or a private club located in a wet area.

(b) A person into whose charge malt beverages are delivered as provided in this section and who is delivering and obtaining payment for any such malt beverages at a licensed retailer's place of business or at a private club located in a wet area must at that time provide a sales invoice for such malt beverages that must be signed by the purchaser of the malt beverages. The invoice must show the purchaser, the quantity of each type of container sold, and the price. A copy of such invoice shall be furnished to the purchaser at the time of sale and a copy of the signed sales invoice must be furnished to the authorized seller of such malt beverages within 24 hours from the time of its delivery.

(c) A person into whose charge malt beverages are delivered as provided in this section must possess the signed sales invoices required by subsection (b) of this section for any such malt beverage that is not in the person's possession. Records pertaining to any such shipment must be shown to any representative of the commission or any peace officer upon demand.

§41.23. Providing Retailer Samples: Nonresident Seller.

(a) A holder of a Nonresident Seller's Permit must purchase samples from a package store permit or wholesale permit holder.

(b) Samples purchased by a nonresident seller from a wholesaler's inventory are considered "first sale" for purposes of taxation under Alcoholic Beverage Code §201.03. The wholesaler shall remit excise taxes for samples purchased not later than the 15th day of the month following the month in which occurs the "first sale."

§41.24. Providing Retailer Samples: Distiller's and Rectifier's Permit.

(a) A holder of a Distiller's and Rectifier's Permit may provide samples obtained from the distiller's inventory to a retailer in accordance with Alcoholic Beverage Code §14.07.

(b) Samples taken from the distiller's inventory are considered "first sale" for purposes of taxation under Alcoholic Beverage Code §201.03. The holder of the Distiller's and Rectifier's Permit shall remit excise taxes for samples taken from inventory not later than the 15th day of the month following the month in which occurs the "first sale."

§41.25. Nonresident Seller's Report.

(a) Each holder of a nonresident seller's permit shall make a monthly report to the commission on forms prescribed or approved by the executive director or the executive director's designee.

(b) The report shall be electronically submitted or, if mailed, postmarked on or before the 15th day of the month following the calendar month for which the report is made.

(c) Upon request by an authorized representative of the commission, invoices shall be submitted to support each entry in the report. A legible copy of each invoice must show the:

- (1) invoice number and invoice date;
- (2) trade name, permit number, and address of the seller;
- (3) trade name, permit number, and shipping address of the purchaser;
- (4) brand name, type, number and size of containers, total cases, unit or line item extension price, and total sales price;
- (5) origin of shipment and shipping date; and
- (6) total by taxable class gallons of each class of liquor.

(d) As long as a nonresident seller's permit remains active, the monthly report required by this section must be filed each month even if no sales or shipments have been made.

§41.26. Nonresident Brewer's Report.

(a) Each holder of a nonresident brewer's license shall make a monthly report to the commission on forms prescribed or approved by the executive director or the executive director's designee.

(b) The report shall be electronically submitted or, if mailed, postmarked on or before the 15th day of the month following the calendar month for which the report is made.

(c) Upon request by an authorized representative of the commission, invoices shall be submitted to support each entry in the report. A legible copy of each invoice must show the:

- (1) invoice number and invoice date;
- (2) trade name, license number, and address of the brewer;
- (3) trade name, license or permit number, and shipping address of the purchaser;
- (4) brand name, type, number and size of containers, total cases, unit or line-item extension price, and total sales price;
- (5) origin of shipment and shipping date; and
- (6) total gallons of malt beverages invoiced.

(d) As long as a nonresident brewer's license remains active, the monthly report required by this section must be filed each month even if no sales or shipments have been made.

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SUBCHAPTER C. EXCISE TAXES

16 TAC §§41.30 - 41.40

New §41.30 - 41.40 are proposed pursuant to the commission's authority under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new rules require the repeal of current §§41.30 - 41.32, 41.35, 41.38, and 41.39.

§41.30. Excise Tax.

Holders of licenses and permits authorizing the manufacture, wholesaling, or distribution of distilled spirits, wine, and malt beverages in this state must pay the assessed excise tax not later than the 15th day of the month following the month in which occurs the "first sale" as this term is defined in Alcoholic Beverage Code §§201.02, 201.41 and 203.02. All taxes shall be remitted by electronic funds transfer, check, or money order made payable to the Texas Alcoholic Beverage Commission.

§41.31. Monthly Report of Distilled Spirits, Wines, and Malt Beverages.

(a) Each holder of a distiller's and rectifier's permit, any class of wholesaler's permit, a winery permit, a brewer's license, or a distributor's license shall make a monthly report to the commission on forms prescribed or approved by the executive director or the executive director's designee.

(b) The report shall be electronically submitted or postmarked by the license or permit holder with the commission at its offices at Austin, Texas, on or before the 15th day of the month following the calendar month for which the report is made.

(c) Upon request by an authorized representative of the commission, invoices shall be submitted to support each entry in the report. A legible copy of each invoice must show:

(1) invoice number and invoice date;

(2) trade name, license number and address of licensed brewer for malt beverages;

(3) trade name, permit number and address of permitted non-resident seller, distiller or winery for wine and distilled spirits;

(4) trade name and shipping address of customer;

(5) brand name, type, number and size of containers, total cases, unit or line-item extension price, and total selling price;

(6) origin of shipment and shipping date; and

(7) total gallons by taxable class of alcohol invoiced.

(d) The monthly report required by this section must be filed each month even if no sales or shipments have been made.

§41.32. Out-Of-State Winery Direct Shipper's Permits.

(a) This rule relates to Chapter 54 of the Alcoholic Beverage Code.

(b) Each holder of an out-of-state winery direct shipper's permit shall make reports (Direct Shipper's Report) to the commission on forms prescribed by the executive director or executive director's designee.

(c) The report shall be made and filed by the permittee with the commission at its offices in Austin, Texas, on or before the 15th day of the month following the end of the reporting period for which the report is made and shall show:

(1) the reporting period and year for which the report is made, the permit number and the name and address of the winery; and

(2) the ship date, invoice date, invoice number, customer name, city, total wine gallons per invoice, and carrier name and tracking number for each sale and delivery.

(d) The permittee shall attach to the Direct Shipper's Report either:

(1) complete, unredacted copies of invoices showing:

(A) the names and addresses of the individuals to whom the alcoholic beverages were shipped;

(B) the brand name shipped, the container size and the quantities of each brand name;

(C) the prices charged for each brand name;

(D) the licensed common carrier used to deliver the alcoholic beverages; and

(E) the licensed common carrier tracking number used to identify each shipment; or

(2) a complete, unredacted list containing the information described in paragraph (1) of this subsection.

(e) Holders of out-of-state winery direct shipper's permits must pay the excise tax on the total gallons of wine shipped into the state, not later than the 15th day of the month following the reporting period the wine was shipped into the state. Remittance of the tax due on wine, less 2.0% of the amount due when submitted within the required time, shall accompany the Direct Shipper's Report and shall be made by check, United States money order, or other acceptable methods of payment payable to the Texas Alcoholic Beverage Commission.

(f) As long as an out-of-state winery direct shipper's permit remains active, the reports required herein must be filed even though no sales or shipments have been made.

(g) Holders of out-of-state winery direct shipper's permits that shipped 5,000 gallons annually or more to consumers in Texas during the previous calendar year, must file a monthly report.

(h) Holders of out-of-state winery direct shipper's permits that shipped less than 5,000 gallons annually to consumers in Texas during the previous calendar year, must file a quarterly report. Quarterly Reporting Periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31.

(i) Holders of out-of-state winery direct shipper's permits must:

(1) require adult signature upon delivery of alcoholic beverages and notify the carrier that the shipment contains alcoholic beverages;

(2) ensure that any third party it uses for order fulfillment identifies and marks the packages to be shipped as containing alcohol and obtains an adult signature upon delivery of the alcoholic beverage product;

(3) maintain tracking status documentation for each shipment to a Texas consumer, which must include delivery confirmation and undeliverable shipments; and

(4) provide records relating to alcohol shipments to Texas consumers made by a third party on behalf of the permit holder.

(j) Failure to comply with the requirements of this section or accurately maintain required records may result in cancellation or suspension of the direct shipper's permit.

(k) Holders of out-of-state winery direct shipper's permits that contract with a third party to provide packaging services and/or record-keeping services, such as filing state tax reports, shall ensure all service records and tax reports subject to the third-party contract are available upon commission request.

§41.33. Excise Tax Exemptions.

The following transactions are exempt from the requirement to pay excise taxes:

(1) Sales of sacramental wine in compliance with §41.34 of this title;

(2) Out-of-state sales in compliance with §41.35 of this title;

(3) Export of malt beverages that are not legal for sale in Texas in compliance with §41.36 of this title;

(4) Alcoholic beverages destroyed in compliance with §41.37 of this title; and

(5) Sales of alcoholic beverages for industrial purposes.

§41.34. Sacramental Wine.

(a) Any minister, priest, rabbi, or the authorized head of any religious organization may obtain any wine, tax free, for sacramental purposes.

(b) Each wholesaler, Class B wholesaler, or winery shall, for each transaction, obtain a letter from the minister, priest, rabbi, or other authorized head of any religious organization who obtains from him any wine for sacramental purposes, tax-free, to the effect that said wine will be used for sacramental purposes. In computing tax liability, no credit shall be allowed for such transactions unless such letter is submitted as documentary proof that such wine was delivered to a minister, priest, rabbi, or other authorized head of a religious organization, and such letter shall be kept available for the inspection of a representative of the commission for a period of at least two years.

§41.35. Export of Alcoholic Beverages.

(a) This rule applies to license and permit holders authorized under Alcoholic Beverage Code §§14.01, 16.01, 19.01, 20.01, 62.01, 62.09, 64.01, 66.01, and 74.08.

(b) License and permit holders to whom this rule applies may export alcoholic beverages only in compliance with all of the following:

(1) License and permit holders authorized to export alcoholic beverages must maintain copies of billing invoices and shipping documents to support any export out of the State of Texas. Supporting documentation must include an order signed by the purchaser of the distilled spirits or wines or, in case of return to a distillery or brewery, a letter of authority.

(2) The alcoholic beverages may then be delivered to a common carrier that holds a carrier's permit, to transport alcoholic beverages for export.

(3) If an export shipment of alcoholic beverages is transported under this section, the license or permit holder must also obtain verification of the receipt of the alcoholic beverages from the state liquor authority in the state where the shipment is received. Verifications of this type must be kept on file by the license or permit holder for inspection or audit by any representative of the commission.

(4) Transactions under this section must be listed as tax-exempt out-of-state exports on monthly excise tax reports.

§41.36. Export of Malt Beverages Not Legal for Sale.

(a) This section applies to the export of malt beverages that are not legal for sale in Texas under Alcoholic Beverage Code §§62.09, 64.09, and 66.11.

(b) The holder of any class of distributor's license with the intent to receive, store, transport, and deliver for export to another state malt beverages that are otherwise illegal to sell to a Texas retailer because of alcohol content, container size, package, or label shall:

(1) store and segregate the products separately from products that are legal to sell to a Texas retailer;

(2) prepare a separate invoice for each transaction, which shall be different from the invoice used for malt beverages that are legal to sell to a Texas retailer; and

(3) maintain each invoice for at least two years and make them available upon request by an authorized representative of the commission.

§41.37. Destructions.

(a) Each permittee subject to the provisions of Alcoholic Beverage Code §§201.03, 201.04, or 201.42, and each licensee subject to the provisions of Alcoholic Beverage Code §203.01, is entitled to receive a tax exemption or a tax credit for alcoholic beverages destroyed in accordance with subsections (c) - (g) of this section.

(b) Each permittee or licensee eligible to destroy alcoholic beverages following a natural disaster pursuant to Alcoholic Beverage Code §109.09, is entitled to receive a tax exemption or a tax credit for alcoholic beverages destroyed in accordance with subsection (i) of this section.

(c) To be claimed as a destruction for purposes of receiving a tax exemption or a tax credit, the alcoholic beverages must be destroyed in such a manner that the product is rendered unrecoverable or unfit for human consumption.

(d) A permittee or licensee must comply with the following requirements prior to the destruction of alcoholic beverages for which a tax exemption or tax credit is claimed, unless it submits to the commission a written request for an exception and receives approval of the request prior to destruction:

(1) At least three full working days prior to the destruction, the permittee or licensee must notify the nearest authorized representative of the commission of the intent to destroy the alcoholic beverages. This notification must be made in writing on the commission's Application for Destruction of Alcoholic Beverages and contain a complete listing by brand, quantity, container size, and package size of the alcoholic beverages to be destroyed. This requirement for a complete listing may be satisfied by attaching a computerized listing that provides all the required documentation to the Application for Destruction of Alcoholic Beverages.

(2) The permittee or licensee must receive written approval from an authorized representative of the commission to conduct the destruction.

(e) To support a claim for a tax exemption or tax credit for a destruction, the permittee or licensee must retain the following documentation and make it available to an authorized representative of the commission upon request:

(1) a signed copy of the Application for Destruction of Alcoholic Beverages indicating that it was approved, which an authorized representative of the commission shall provide to the permittee or licensee when the destruction is approved;

(2) if the alcoholic beverages were destroyed at a location that charges a fee for this service, a copy of the receipt for payment of the fee; and

(3) an affidavit of destruction executed by an employee of the permittee or licensee who witnessed the destruction of the alcoholic beverages. The affidavit must include the date of destruction, the destruction location, and a description of how the alcoholic beverages were destroyed. A separate affidavit must be prepared for distilled spirits, wine, and malt beverages.

(f) The license or permit holder shall submit the approved Application for Destruction of Alcoholic Beverages (including any attachments) with the monthly excise tax report it files with the commission upon which it claims the tax exemption for the destroyed alcoholic beverages. If the permittee or licensee is unable to claim the destroyed alcoholic beverages as an exemption on a tax report, it may submit a letter to the commission requesting issuance of an authorized tax credit.

(g) The license or permit holder shall maintain a copy of the approved Application for Destruction of Alcoholic Beverages (including any attachments) and make it available upon request for inspection by an authorized representative of the commission.

(h) The commission may require that the alcoholic beverages designated for destruction be physically inspected and inventoried by a representative of the commission prior to the scheduled destruction and/or that the actual destruction be witnessed by an authorized representative of the commission.

(i) A permit or license holder may destroy uninsured malt beverages subject to destruction under Alcoholic Beverage Code §109.09 only in compliance with the following requirements:

(1) the alcoholic beverages must be destroyed in such a manner that the product is rendered unrecoverable;

(2) an employee of the permittee or licensee who witnessed the destruction of the malt beverages must execute an affidavit of destruction that includes the date of destruction, the destruction location, and a description of how the alcoholic beverages were destroyed;

(3) not later than 30 days following the destruction of malt beverages under this section, the permittee or licensee must submit to the commission the affidavit required under subsection (i)(2) of this section with a completed and signed commission form for notification of destruction of uninsured product after a natural disaster; and

(4) The permittee or licensee must retain the following documentation and make it available to the commission upon request:

(A) a copy of the receipt for the cost of destruction, if the malt beverages were destroyed at a location that charged a fee for the service;

(B) a copy of the completed and signed Notification of Destruction of Uninsured Product after a Natural Disaster; and

(C) a copy of all destruction affidavits executed by the person who witnessed the destruction.

§41.38. Production Record.

(a) Each holder of a distiller's and rectifier's permit, winery permit, brewer's license, or brewpub license shall make a production record to be retained by the license or permit holder and made available to a representative of the commission upon request.

(b) The production record shall show:

(1) a full and complete report of all liquor or malt beverages manufactured, received, and produced;

(2) the date of each day's operation;

(3) for each day's operation, the opening inventory in bulk gallons;

(4) receipts in bulk gallons;

(5) bulk gallons used in production;

(6) closing inventory in bulk gallons;

(7) total units produced, stating number, size, and type of container;

(8) total gallons produced; and

(9) total taxable gallons produced of malt beverage or class of liquor.

(c) Entries shall be made on the production record no later than three days after malt beverage or liquor is received or produced.

(d) Each winery shall maintain a record of wine manufactured and labeled pursuant to Alcoholic Beverage Code §16.01(b). This record shall include date of manufacture, the name of the adult(s) for whom the wine was manufactured and labeled, a sample label, and the total gallons manufactured for each adult. Each record shall be made available to a representative of the commission upon request.

§41.39. Amount of Excise Tax Bonds.

(a) Excise tax bonds required by Chapter 204 of the Alcoholic Beverage Code and by Chapter 33, subchapter C of this title to be maintained by license or permit holders authorized to import malt beverages or liquor into this state shall be in a minimum amount of \$1,000 and the maximum amounts of the bonds shall be determined by the executive director. The maximum bond fixed by the executive director must be an amount that will adequately protect the State of Texas against the anticipated tax liability of the principal during any six-week period.

(b) The executive director may investigate the adequacy of any bond and adjust the bond as they deem justified by the investigation results.

§41.40. Required Records for Brewpubs.

(a) Each holder of a brewpub license shall make a monthly report to the commission on forms prescribed or approved by the executive director or executive director's designee.

(b) The report shall be electronically submitted or, if mailed, postmarked on or before the 15th day of the month following the calendar month for which the report is made.

(c) Upon request by an authorized representative of the commission, invoices shall be submitted to support each entry in the report. A legible copy of each invoice must show the:

(1) invoice number and invoice date;

(2) trade name, license number, and address of the brewpub;

(3) trade name, license or permit number, and shipping address of the purchaser;

(4) brand name, type, number and size of containers, total cases, unit and or line-item extension price, and total sales price;

(5) origin of shipment and shipping date; and

(6) total gallons of malt beverage invoiced.

(d) As long as a brewpub license remains active, the monthly report required by this section must be filed each month even if no sales or shipments have been made.

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SUBCHAPTER D. SALES OF ALCOHOLIC BEVERAGES NOT IN REGULAR COURSE OF BUSINESS

16 TAC §§41.41 - 41.43

New §§41.41 - 41.43 are proposed pursuant to the commission's authority under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new rules require the repeal of current §§41.41 - 41.43.

§41.41. Sale to and by Lien Holders.

(a) All alcoholic beverages are subject to levy and other judicial process the same as any other personal property under the general laws of the state.

(b) Alcoholic beverages may be sold to and purchased by lien holders and licensees and permittees who are privileged to purchase and sell the same.

(c) In all instances after such sale has been made, the person making the sale shall notify the executive director or the executive director's designee, giving the date of sale, the names and addresses of both the original owner and the purchaser, an inventory of the beverages sold and the name of the lien holder or lien holders. A lien holder who is not a licensee or permittee and who purchases alcoholic beverages or who procures title thereto in any other lawful manner shall dispose of such alcoholic beverages within 30 days after acquiring title thereto, unless the executive director grants additional time for good cause shown.

(d) Before reselling alcoholic beverages under this section, the lien holder shall apply to the executive director or the executive director's designee for permission to make such sale. The application shall show the name and address of the intended purchaser, the number of the intended purchaser's license or permit, the quantity and type of beverages to be sold, and the date and manner of the sale, and shall include copies of any documentation by which the lien holder procured title thereto.

§41.42. Sale by Carrier.

(a) Any person authorized to transport alcoholic beverages may sell, in accordance with law, any alcoholic beverage the person acquires by reason of unpaid charges, to any permittee or licensee who is privileged to import and sell such alcoholic beverage.

(b) Any person contemplating such sale shall apply to the executive director or the executive director's designee, setting out the facts regarding such shipment, the names and addresses of the consignor and consignee, the name and address of the proposed purchaser, and documentation supporting the amount of the charges due.

(c) No person authorized to transport alcoholic beverages shall sell or offer for sale any alcoholic beverages for unpaid charges except in the manner herein provided.

§41.43. Sale after Cancellation, Expiration, or Voluntary Suspension of License or Permit.

(a) In the event any license or permit granted under the code is cancelled, expires, or is voluntarily suspended by the license or permit holder, the license or permit holder is authorized for 30 days thereafter to sell or dispose of its remaining inventory of alcoholic beverages on hand at the time of the license or permit cancellation, expiration, or voluntary suspension, in bulk, to a licensee or permittee authorized to purchase and sell same.

(b) If a necessity exists for a longer period, written permission must be procured from the executive director or the executive director's designee. The application for such permission shall specify the reasons.

(c) A holder of a license or permit who holds more than one such license or permit and who submits one to the commission for cancellation or voluntary suspension may request approval to transfer the inventory on hand to one of its other licensed or permitted locations.

(d) In all cases where alcoholic beverages are disposed of or sold in bulk as herein set out, a sworn transfer document shall be filed with the local office of the commission and is subject to approval by the executive director or the executive director's designee. Approval of the sale or transfer shall not be granted if either the seller or purchaser is delinquent under Alcoholic Beverage Code §102.32 and §45.130 of this title at the time of the request.

(e) The transfer document filed with the commission must show the complete inventory of alcoholic beverages on hand. The inventory shall show the quantity, brand, and size of each container of alcoholic beverage, and for distilled spirits it shall also show the identification stamp number affixed to each container.

(f) Both the transferor and the transferee shall sign the transfer document under oath before a notary public swearing to the correctness of the transaction.

(g) All alcoholic beverages shall be transferred in a single transaction unless, based on the circumstances, multiple transactions are approved by the executive director or the executive director's designee.

(h) No person shall dispose of any alcoholic beverages after the expiration, cancellation, or voluntary suspension of a license or permit except in the manner and within the time herein specified unless written permission is procured from the executive director or the executive director's designee.

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SUBCHAPTER E. PRIVATE CLUBS

16 TAC §§41.50 - 41.56

New §§41.50 - 41.56 are proposed pursuant to the commission's authority under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new rules require the repeal of current §§41.51 - 41.56.

§41.50. General Provisions.

(a) Definitions. The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

(1) Club--A private club.

(2) Guest--An individual who is personally known by the member or one of the member's family and who is admitted to the club premises by personal introduction of, or in the physical company of, the member or one of the member's family.

(3) Member and membership--A member of and membership in a private club.

(4) Member's family--A spouse, parent, sibling, or adult child of the member.

(b) Digital Recordkeeping. A club using a computer system to maintain its membership records is not be required to keep a well-bound book if such computer system provides the information as required by these rules.

§41.51. Requirements for Permit; Membership.

(a) This section does not apply to temporary members or to hotel patrons, as described in Alcoholic Beverage Code §§32.09, 32.10, and 32.11.

(b) To qualify to hold a private club registration permit, a private club must:

(1) have 50 or more members at all times;

(2) have a membership committee composed of three or more members of the club and vested with authority by charter, bylaw or regulation to approve or reject membership applications and terminate existing memberships. The governing body of a club, if qualified under this provision, may be the membership committee, and when functioning as such is subject to and governed by all provisions herein relating to the membership committee. When considering a membership application or termination of membership, the membership committee shall keep written minutes showing the meeting date, the names of all committee members present, the name of any person admitted to membership, and the name of any person whose membership was terminated. No minutes are required of any discussion or action regarding a membership application that is denied;

(3) have, other than charter members, no members except those approved by at least three members of the membership committee at a meeting of such a committee;

(4) keep a well-bound book in which is shown the following about each member: the full name of the member, the member's initial membership number which shall be issued in sequence, the current complete address of such member, the date such member was admitted to membership, and the date such member was removed from membership. When a member has been removed from membership, the membership number may be reassigned to another member. Additional well-bound books may be used if necessary to record the information required by this paragraph, but all such books shall be kept permanently by the club;

(5) keep all books, records, and minutes required herein on the premises of the club, and make them available to any representative of the commission upon reasonable notice; and

(6) maintain in force any bond required and executed by the corporation as principal, if an incorporated club, or by an officer of the club as principal, if an unincorporated club. Such bond shall be executed by a surety company duly authorized and qualified to do business in this state, as surety, in an amount required by rule of the commission payable to the State of Texas conditioned that all fees and taxes owed by such club to the State of Texas shall be paid. Such bond shall be in a form approved by the executive director and the attorney general of Texas.

(c) No membership shall be terminated except by action of the membership committee or by written resignation of the member. Resignation of any member shall be recorded immediately in the minute book of the membership committee and in the records required by subsection (b) of this section.

(d) The executive director may, after notice and hearing, refuse to issue a private club registration permit if the executive director finds that the applicant has failed to comply with any requirement set forth in this subsection.

(e) As provided in the Alcoholic Beverage Code §32.01, alcoholic beverages owned by members of a private club may only be served to and consumed by a member, a member's family, or their guests.

(f) Permittees may access electronically readable information on a driver's license, commercial driver's license, or identification certificate for the purpose of verifying the accuracy of the records required by this rule. Information so accessed may not be retained longer than is reasonably necessary to ensure verification. The information may not be marketed in any manner. Written consent must be obtained from the club member or prospective member when accessing electronically readable information and proof of such consent must be maintained with the permittee's membership records.

§41.52. Temporary Memberships.

(a) This rule relates to §32.09 of the Alcoholic Beverage Code.

(b) A holder of a private club registration permit shall:

(1) issue a temporary membership card to any person who intends to be served alcoholic beverages on its licensed premises, except a person who is a member of the club or a guest of a member of the club, or, if the club is located in a hotel, a patron of the hotel who is at the hotel for overnight lodging and is a guest of the hotel manager who is a member of the club; and

(2) keep a record with entries made in chronological order showing the following about temporary membership cards issued: the date issued, the name of the person to whom the card was issued, and the serial number of the temporary membership card.

(c) A holder of a private club registration permit shall not serve an alcoholic beverage to a person who holds a temporary membership card unless the temporary card is:

(1) issued to the club by the commission;

(2) issued to the temporary member by the manager of the club, or other person in charge of the premises of the club;

(3) complete and legible, with all blanks, except signature blanks, properly completed, including the name of the temporary member, club name, city, and time period covered;

(4) signed at the time of issuance by the manager of the club or other person in charge of the licensed premises; and

(5) in possession of the temporary member to whom it is issued.

(d) The commission shall not issue a temporary membership card to a club until the commission has received a written request from a club in the manner prescribed by the commission, together with the effective fee established in the Texas Alcoholic Beverage Code. Payment of the fee shall be made only by cashier's check, certified check, corporate check, through the commission's electronic portal, or by United States postal money order payable to the Texas Alcoholic Beverage Commission.

§41.53. Pool Systems.

(a) This section relates to §§32.06 and 32.13 of the Alcoholic Beverage Code.

(b) Equal Assessment Pool Systems. Each holder of a private club registration permit operating under a pool system that requires each member of the pool to participate equally in the purchase and replacement of alcoholic beverages shall:

(1) purchase all such alcoholic beverages with money assessed and collected in advance from each member equally;

(2) initially set the assessment fee according to the club's by-laws or governing body and increase or decrease the fee as needed upon approval of the club's governing body and recording of the fee change in the club's minutes;

(3) use only money from the fee assessment to purchase or replace alcoholic beverages purchased for use under the equal assessment pool system; and

(4) keep a well-bound book in which is recorded the following about each member of the pool: the member's name and membership number, the date and amount of each liquor pool assessment, and the date of payment of the assessment. This rule does not apply to fraternal organizations or to veterans' organizations.

(c) Replacement Pool Systems. Each holder of a private club registration permit operating under a replacement pool system by which a designated percentage of daily service charges collected for the service of alcoholic beverages is set aside to replace alcoholic beverages served to club members and their guests and to temporary membership card holders shall:

(1) initially set the percentage according to the club's by-laws or governing body and increase or decrease the percentage as needed upon approval of the club's governing body and recording of the percentage change in the club's minutes; and

(2) use only money from the designated percentage of daily service charges collected for the service of alcoholic beverages to purchase or replace alcoholic beverages purchased for use under the replacement pool system.

(d) Each holder of a private club registration permit operating under the pool system using either equal assessments or a replacement percentage shall prepare a record showing separately the pool assessments or replacement funds collected from the membership and the disbursements of these collections for purchases of alcoholic beverages.

(e) The holder of a private club registration permit or a private club exemption certificate permit may purchase wine only from the holder of a local distributor's permit.

§41.54. Locker Systems.

(a) This section relates to §§32.05, 32.10, and 32.13 of the Alcoholic Beverage Code.

(b) A club may allow its members to store their privately-owned alcoholic beverages in secure lockers on the club premises.

(c) All alcoholic beverages owned by each member under the locker system must be kept in a locker rented only to such member at all times, except when the member, one of the member's family or the member's guest is present on the premises and using such alcoholic beverages. This section does not apply to fraternal organizations or to veterans' organizations.

(d) The club will be assessed gross receipts taxes on alcoholic beverages kept in member lockers based upon storage fees, corkage fees, and/or service fees collected by the club.

(e) The club must keep the following records on the premises for at least two years and must make available to the TABC upon reasonable request:

(1) receipts or other records of storage fees, corkage fees, and/or service fees collected;

(2) an inventory of each alcoholic beverage stored in a member locker, including the brand and container size of distilled spirits, locker number, and member name or other unique identifier, such as a membership number; and

(3) with respect to distilled spirits, the inventory must include other identification approved by the commission sufficient to demonstrate that the distilled spirit is owned by the member.

(f) Once stored, members may not remove an alcoholic beverage from the club premises except as authorized by §32.15 of the Alcoholic Beverage Code.

§41.55. Food Service.

A private club shall provide regular, adequate food service including, at a minimum, meals available on the club premises for service to members, their families, and guests. The food service requirement may be fulfilled through the use of a concession or catering agreement with an outside vendor. Prepared food must be available upon request and must be delivered and served at the licensed premises. Payment for food service must be made to the private club. This section does not apply to fraternal organizations or veterans' organizations.

§41.56. Enforcement.

The executive director may, after notice and hearing, suspend for a period not exceeding 60 days or cancel a private club registration permit:

(1) if the executive director finds that the club or any of its members, agents, servants, or employees has:

(A) served, consumed or permitted another person to consume an alcoholic beverage on the premises of the club at any time when the private club registration permit of such club is suspended by an order of the executive director;

(B) made a false statement or a misrepresentation in any book, record, minutes or report, or other written matter required to be kept or reported by this subchapter or by any provision of the Alcoholic Beverage Code; or

(C) failed to comply with any requirement set forth in this subchapter; or

(2) for any reason listed in §32.17 of the Alcoholic Beverage Code.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Shana Horton

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Texas Alcoholic Beverage Commission

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For further information, please call: (512) 206-3451



SUBCHAPTER F. IDENTIFICATION STAMPS

16 TAC §41.60

New §41.60 is proposed pursuant to the commission's authority under §5.31 of the Code, which allows the commission to prescribe and publish rules necessary to carry out the provisions of the Code.

The proposed new rule does not impact any other current rules or statutes.

§41.60. Identification Stamps and Local Distributor's Records.

(a) Definitions. The following words and terms, when used in this section, have the following meanings, unless the context clearly indicates otherwise:

(1) Identification stamp--The identification stamp referenced in §§28.15 and 32.20 of the Alcoholic Beverage Code.

(2) Invoice--An instrument requesting payment for alcoholic beverages issued by the seller of alcoholic beverages to a permittee.

(3) Mutilate--To scratch, cut, tear, or abrade in a manner which inflicts obvious and substantial damage to the stamp but does not totally remove or obliterate the stamp.

(4) Retail permittee--The holder of a mixed beverage permit, a private club registration permit, or private club exemption certificate permit.

(b) The holder of a local distributor's permit shall keep any record required by any rule of the commission or by the Alcoholic Beverage Code for a period of two years on the licensed premises and shall make any such record available to a representative of the commission upon request within a reasonable time.

(c) Identification stamps shall be affixed only by the holder of a local distributor's permit to whom such stamps have been issued by the commission. When affixing identification stamps, the holder of a local distributor's permit shall affix each identification stamp near the top of the brand label of the bottle of distilled spirits in such a manner that some portion of the identification stamp covers and is attached to some portion of the brand label but does not cover any information on the brand label, unless the exception in subsection (d) of this section applies. "Brand label" means the principal display panel that is most likely to be displayed, presented, shown, or examined under normal and customary conditions of display for retail sale.

(d) A licensee selling cases of distilled spirits containing only multiple spirits containers each with a capacity of 375 mL or less may stamp the case with one identification stamp prior to selling the alcoholic beverages to a mixed beverage permittee, rather than individually stamping each bottle in the case. The mixed beverage permittee purchasing cases of distilled spirits subject to this section shall retain for two years invoices showing the identification stamp for each case purchased.

(e) Transaction records.

(1) Each holder of a local distributor's permit shall prepare a record making an entry thereon on each date there occurs any of the following transactions involving identification stamps and showing the following:

(A) Quantity of identification stamps received.

(B) Quantity and serial numbers of identification stamps affixed, and also showing the invoice date, invoice number, retailer trade name, and retailer permit number.

(C) Quantity of identification stamps on hand after each receipt or affixing of such stamps.

(D) When the holder of a local distributor's permit affixes identification stamps prior to the sale of such stamped merchandise, the permittee shall also record the date the merchandise is stamped showing the number of stamps used per brand and size. Stamped merchandise shall be stored separately from all other merchandise on hand. Stamps issued from pre-stamped stock must be listed individually per invoice line item on sales invoices prepared for retail sales.

(E) The serial number of each stamp issued, lost, stolen, voided, destroyed, or issued as a replacement stamp must be recorded.

(2) Full title and ownership of all identification stamps shall remain vested in the commission. Upon termination of any local distributor's permit, all unaffixed identification stamps on hand shall be surrendered to the commission along with distribution records of stamps issued by the local distributor permittee.

(f) An invoice shall be issued in original and one copy in consecutive numbered order, showing the date of the sale or distribution, the name and permit number of the seller and the purchaser, and the purchaser's complete address, the serial numbers of all identification stamps affixed to the merchandise, the quantity, brand and class of alcoholic beverages sold and the total price of each brand and class shown thereon. Such invoices or a copy thereof shall be delivered to the permittee and a copy of such invoices shall be kept by the seller making same. The seller's copy of the invoice must be signed by the purchaser.

(g) A local distributor may elect to maintain identification stamp records required by subsection (e) of this section in an electronic format using an automated stamp record system. If this election is made, the automated system must provide the information required by subsection (e) of this section, and the automated system must be inspected and have prior approval from the Commission.

(h) The invalidation of identification stamps required by §28.09 of the Alcoholic Beverage Code shall be done by mutilating the stamp. The marking of a stamp with ink, dye, or other material is not authorized as a method for invalidating the stamp.

(i) No retail permittee shall possess or permit any person to possess on the permittee's licensed premises any distilled spirits in any container bearing an identification stamp that has been mutilated or otherwise damaged or marked to a substantial degree.

(j) No retail permittee shall possess or permit any person to possess on the permittee's licensed premises any blank or serially numbered TABC identification stamp that is not properly attached to a distilled spirits container that has been properly invoiced to the retail permittee by a local distributor.

(k) All provisions of §§28.08, 28.09, and 28.15 of the Alcoholic Beverage Code applicable to a mixed beverage permittee apply to holders of private club registration permits and private club exemption certificate permits.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

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Shana Horton

Rules Attorney

Texas Alcoholic Beverage Commission

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For further information, please call: (512) 206-3451

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PART 4. TEXAS DEPARTMENT OF LICENSING AND REGULATION

CHAPTER 61. COMBATIVE SPORTS

16 TAC §§61.10, 61.20, 61.23, 61.40, 61.41, 61.43, 61.47, 61.80

The Texas Department of Licensing and Regulation (Department) proposes amendments to existing rules at 16 Texas Administrative Code (TAC), Chapter 61, §§61.10, 61.20, 61.23, 61.40, 61.41, 61.43, 61.47, and 61.80, regarding the Combative Sports Program. These proposed changes are referred to as the "proposed rules."

EXPLANATION OF AND JUSTIFICATION FOR THE RULES

The rules under 16 TAC Chapter 61 implement Texas Occupations Code, Chapter 2052, Combative Sports.

The proposed rules implement the provisions of House Bill (HB) 1560, 87th Regular Session (2021) that removed licensure requirements for persons acting as combative sports seconds, matchmakers, and event coordinators. The proposed rules remove the licensure requirement for seconds, matchmakers, and event coordinators; repeal provisions that are no longer necessary in light of the removal of the licensing requirement; add a provision stating that a combative sports contestant is responsible for the conduct of his or her seconds; and make non-substantive changes to correct style and gender-specific language. The proposed rules are necessary to implement HB 1560.

The proposed rules were presented to and discussed by the Combative Sports Advisory Board at its meeting on September 21, 2021. The Advisory Board did not make any changes to the proposed rules. The Advisory Board voted and recommended that the proposed rules be published in the *Texas Register* for public comment.

SECTION-BY-SECTION SUMMARY

The proposed rules amend §61.10 (Definitions) to remove subsection (11) (the definition of "matchmaker") and correct gender-specific language in subsection (8) (the definition of "knock-down").

The proposed rules amend §61.20 (General Licensing Requirements) to remove the requirement in subsection (a) that combative sports seconds, matchmakers, and event coordinators hold a license in order to participate in a combative sports event. The proposed rules also correct gender-specific language in subsection (c).

The proposed rules amend §61.23 (General Prohibitions) to repeal subsection (d), which prohibited licensed matchmakers from also being licensed as a contestant, ring official, or second. The proposed rules also amend existing subsection (e) to make it clear that a licensed promoter may continue to act as a combative sports second. Additionally, the proposed rules remove a reference to matchmakers in subsection (a) and correct gender-specific language in subsection (f).

The proposed rules amend §61.40 (Responsibilities of the Promoter) to remove references to matchmakers and event coordinators in sections (b)(10), (b)(15)(F), and (b)(17). The proposed rules also modify subsection (a) to make it clear that promoter

staff, not only the promoter, are allowed in contestant dressing rooms.

The proposed rules amend §61.41 (Responsibilities of the Referee) to remove the provision in subsection (i) requiring a referee to hold the chief second responsible for the conduct of a licensed contestant. This change is required by HB 1560. The proposed rules also reword subsection (b) without substantive change.

The proposed rules amend §61.43 (Responsibilities of Seconds) to remove language stating that a second is responsible for a contestant's corner supplies.

The proposed rules amend §61.47 (Responsibilities of Contestants) to add new subsection (z), which states, "A contestant is responsible for the conduct of his or her seconds. Violation of these rules by a second may subject the contestant to disqualification, forfeiture, administrative penalty, and/or sanction." This change was required in due to HB 1560's removal of the licensure requirement for combative sports seconds. A licensed contestant is the most appropriate party to bear responsibility for a violation of the program statutes or rules by one of their seconds.

The proposed rules amend §61.80 (Fees) to remove fees related to the licensing of seconds, matchmakers, and event coordinators.

FISCAL IMPACT ON STATE AND LOCAL GOVERNMENT

Tony Couvillon, Policy Research and Budget Analyst, has determined that for each year of the first five years the proposed rules are in effect, the department will experience an estimated \$11,900 annual reduction in costs. The expected cost reductions are related to a reduced need for time and resources spent processing license applications, responding to customer service inquiries, conducting background checks, investigating complaints, and taking enforcement action against licensees. Mr. Couvillon has also determined that for each year of the first five years the proposed rules are in effect, the department will lose approximately \$11,000 per year in licensing revenues.

Mr. Couvillon has also determined that for each year of the first five years the proposed rules are in effect, enforcing or administering the proposed rules does not have foreseeable implications relating to costs or revenues of local governments.

LOCAL EMPLOYMENT IMPACT STATEMENT

Mr. Couvillon has determined that the proposed rules will not affect the local economy; thus, the agency is not required to prepare a local employment impact statement under Government Code §2001.022.

PUBLIC BENEFITS

Mr. Couvillon also has determined that for each year of the first five-year period the proposed rules are in effect, the public benefit will be the elimination of unnecessary licensing requirements. Former license holders will also save money each year, as they will not have to submit license applications.

PROBABLE ECONOMIC COSTS TO PERSONS REQUIRED TO COMPLY WITH PROPOSAL

Mr. Couvillon has determined that for each year of the first five-year period the proposed rules are in effect, there are no anticipated economic costs to persons who are required to comply with the proposed rules.

FISCAL IMPACT ON SMALL BUSINESSES, MICRO-BUSINESSES, AND RURAL COMMUNITIES

There will be no adverse economic effect on small businesses, micro-businesses, or rural communities as a result of the proposed rules. Since the agency has determined that the proposed rule will have no adverse economic effect on small businesses, micro-businesses, or rural communities, preparation of an Economic Impact Statement and a Regulatory Flexibility Analysis, as detailed under Texas Government Code §2006.002, are not required.

ONE-FOR-ONE REQUIREMENT FOR RULES WITH A FISCAL IMPACT

The proposed rules do not have a fiscal note that imposes a cost on regulated persons, including another state agency, a special district, or a local government. Therefore, the agency is not required to take any further action under Government Code §2001.0045.

GOVERNMENT GROWTH IMPACT STATEMENT

Pursuant to Government Code §2001.0221, the agency provides the following Government Growth Impact Statement for the proposed rules. For each year of the first five years the proposed rules will be in effect, the agency has determined the following:

1. The proposed rules do not create or eliminate a government program.
2. Implementation of the proposed rules does not require the creation of new employee positions or the elimination of existing employee positions.
3. Implementation of the proposed rules does not require an increase or decrease in future legislative appropriations to the agency.
4. The proposed rules do require a decrease in fees paid to the agency. The proposed rules implement the repeal of three license types and therefore will result in a decrease in fees paid to the department.
5. The proposed rules do not create a new regulation.
6. The proposed rules do expand, limit, or repeal an existing regulation. The proposed rules make it clear that a licensed contestant will bear the responsibility for his or her seconds' compliance with program statutes and rules.
7. The proposed rules do not increase or decrease the number of individuals subject to the rules' applicability.
8. The proposed rules do not positively or adversely affect this state's economy.

TAKINGS IMPACT ASSESSMENT

The Department has determined that no private real property interests are affected by the proposed rules and the proposed rules do not restrict, limit, or impose a burden on an owner's rights to his or her private real property that would otherwise exist in the absence of government action. As a result, the proposed rules do not constitute a taking or require a takings impact assessment under Government Code §2007.043.

PUBLIC COMMENTS

Comments on the proposed rules may be submitted electronically on the Department's website at <https://ga.tdlr.texas.gov:1443/form/gcerules>; by facsimile to (512) 475-3032; or by mail to Vanessa Vasquez, Legal Assistant, Texas Department of Licensing and Regulation, P.O.

Box 12157, Austin, Texas 78711. The deadline for comments is 30 days after publication in the *Texas Register*.

STATUTORY AUTHORITY

The proposed rules are proposed under Texas Occupations Code, Chapters 51 and 2052, which authorize the Texas Commission of Licensing and Regulation, the Department's governing body, to adopt rules as necessary to implement these chapters and any other law establishing a program regulated by the Department.

The statutory provisions affected by the proposed rules are those set forth in Texas Occupations Code, Chapters 51 and 2052. No other statutes, articles, or codes are affected by the proposed rules.

§61.10. Definitions.

The following words and terms have the following meanings:

(1) - (7) (No change.)

(8) Knock-down--A knock-down occurs when any part of a contestant's body, other than the [his] feet, contacts the floor of the ring or fighting area as a result of a blow struck to the contestant by an opponent.

(9) - (10) (No change.)

~~[(11) Matchmaker--One who arranges matches for professional combative sports contestants.]~~

(11) [(12)] Person--Any natural person, corporation, partnership, association or other similar entity.

(12) [(13)] Purse--The financial guarantee or any other remuneration promised to contestants for participating in an event and includes guarantees for cable pay per view, radio, television or motion picture rights.

(13) [(14)] Ring Officials--Referees, judges, ringside physicians and timekeepers.

(14) [(15)] Ringside Physician--An individual who has an unrestricted and unlimited license to practice medicine in this state and who by agreement, is assigned as the physician for a combative sports event.

(15) [(16)] Second--A person who provides assistance or advice to a contestant during a contest.

(16) [(17)] Technical Zone--An alcohol free area located between the ring and a department-approved barrier with access restricted to designated medical personnel and equipment; working officials including, managers, ring officials, contestants, seconds, the promoter, promoter representatives and assignees, round card staff, department staff, assigned contract inspectors, authorized members of the media, authorized members of the event's sanctioning bodies, and security personnel; and regulatory oversight authorities.

(17) [(18)] Timekeeper--A person who is the official timer of the length of rounds/heats and the intervals between rounds/heats and counts when a contestant is down.

§61.20. General Licensing Requirements.

(a) Professional combative sports contestants, promoters, referees, judges, and [seconds, matchmakers,] managers[, and event coordinators] who officiate or participate in a regulated professional event authorized by the Code must be licensed or registered by the executive director. Referees who officiate at regulated amateur events must also be licensed or registered by the executive director.

(b) (No change.)

(c) If a licensee or registrant[~~;~~] other than a contestant [~~or a second.~~] changes his or her address of record, the licensee or registrant shall inform the executive director in writing of the change within 30 days [~~of the change~~].

(d) - (e) (No change.)

§61.23. *General Prohibitions.*

(a) Judges, Timekeepers[~~;~~ Matchmakers], Referees, and Ringside Physicians may not have a direct or indirect financial interest in any contestant.

(b) - (c) (No change.)

~~{(d) A matchmaker may not act as, and may not be licensed as; a contestant, ring official or second.}~~

~~(d) [(e)]~~ A promoter may not act as, and may not be a timekeeper or licensed as a referee or judge. A promoter may be licensed as a manager and may act as a second. A promoter may be licensed as a contestant unless prohibited by Federal law.

~~(e) [(f)]~~ A promoter shall not permit a [~~his~~] promoter's license to be used by another person.

~~(f) [(g)]~~ Licensed promoters may engage in promotions with other licensed promoters so long as each promoter holds a valid unexpired license.

~~(g) [(h)]~~ No person shall be allowed to participate in an event performing a function for which a license is required, unless the person has proof of identification and a current license. Acceptable proof of identification includes driver's licenses, passport, state issued identification cards, federal identification cards, or any other identification required by the executive director.

~~(h) [(i)]~~ A contestant may not act as, and may not be licensed as a judge.

~~(i) [(j)]~~ A person who is an officer or director of a Ranking Organization may not act as, and may not be licensed as a judge.

§61.40. *Responsibilities of the Promoter.*

(a) (No change.)

(b) A promoter shall:

(1) - (9) (No change.)

(10) Provide no less than two private dressing rooms of adequate size for the contestants, [~~and~~] their licensed managers, and seconds, and separate dressing rooms for male and female contestants. Only working department employees, contract inspectors, media, physicians, working ring officials, promoter, promoter staff, [~~matchmaker,~~] manager, and seconds will be allowed in the dressing rooms.

(11) - (14) (No change.)

(15) Ensure that the rules in §61.106 regarding equipment and gloves that apply to a particular type of event are followed and that each event is conducted in compliance with the following:

(A) - (E) (No change.)

(F) There shall be at least one, but no more than three, authorized promoter representative(s) at ringside at all times. Only the promoter's representative(s), department officials, the press, physicians, representatives of sanctioning bodies, and judges shall sit at the ringside tables. For purposes of this subparagraph, [~~an event coordinator is a representative of the promoter; however,~~] assignees are not representatives of the promoter.

(16) Pay by check or money order the licensing fee of any contestant[~~;~~ second~~;~~] or manager[~~;~~] who intends to participate in a scheduled combative sports event and who is not licensed at the time of the event weigh-in.

(17) Supervise the activities of employees [~~and event coordinators~~] to ensure [~~assure~~] that promoted events are conducted in compliance with this chapter and applicable statutes.

(18) (No change.)

(c) - (f) (No change.)

§61.41. *Responsibilities of the Referee.*

(a) (No change.)

(b) The referee may eject from an event any person who violates the Code or department rules. If a second violates this chapter or the Code, the referee may disqualify the [~~seconds'~~] contestant to whom the second is assigned.

(c) - (h) (No change.)

(i) Before each bout, the referee shall call the contestants and their chief seconds together for final instructions. [~~The referee shall hold the chief second responsible for his contestant's conduct during the bout.~~]

(j) - (p) (No change.)

§61.43. *Responsibilities of Seconds.*

(a) - (h) (No change.)

(i) The following rules apply to [~~A second shall be responsible for a contestant's~~] corner supplies[~~;~~].

(1) - (5) (No change.)

(j) - (k) (No change.)

§61.47. *Responsibilities of Contestants.*

(a) - (y) (No change.)

(z) A contestant is responsible for the conduct of his or her seconds. Violation of these rules by a second may subject the contestant to disqualification, forfeiture, administrative penalty, and/or sanction.

§61.80. *Fees.*

(a) The annual fee shall accompany each license or registration application or renewal as follows[~~;~~]:

(1) Promoter--\$900

(2) Contestant--\$20

(3) Manager--\$100

~~{(4) Second--\$20}~~

~~{(5) Matchmaker--\$100}~~

(4) ~~[(6)]~~ Referee--\$125

(5) ~~[(7)]~~ Judge--\$100

(6) ~~[(8)]~~ Amateur Combative Sports Association--\$50

~~{(9) Event Coordinator--\$200}~~

(b) - (d) (No change.)

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.



CHAPTER 82. BARBERS

16 TAC §82.80

The Texas Department of Licensing and Regulation (Department) proposes amendments to an existing rule at 16 Texas Administrative Code (TAC), Chapter 82, §82.80, regarding the Barbering Program. These proposed changes are referred to as the "proposed rule."

EXPLANATION OF AND JUSTIFICATION FOR THE RULE

The rules under 16 TAC Chapter 82 implement Texas Occupations Code, Chapters 1601 and 1603.

The proposed rule is necessary to begin implementing House Bill (HB) 1560, 87th Legislature, Regular Session (2021). HB 1560 makes many changes, including combining the Barbering and Cosmetology program statutes, and eliminating instructor licenses. Under HB 1560, TDLR will discontinue issuing instructor licenses at some point before September 1, 2023, and instructors will transition to holding only the individual practitioner license for their field of instruction. In preparation for that transition, the proposed rule reduces instructor license renewal fees to match the renewal fees for the Class A Barber certificate and specialty licenses or certificates.

SECTION-BY-SECTION SUMMARY

The proposed rule amends §82.80 by reducing the instructor license renewal fee to \$55 and reducing the specialty instructor license renewal fee to \$30.

FISCAL IMPACT ON STATE AND LOCAL GOVERNMENT

Tony Couvillon, Policy Research and Budget Analyst, has determined that for each year of the first five years the proposed rule is in effect, there are no estimated additional costs or reductions in costs to state government as a result of enforcing or administering the proposed rule. The activities required to implement the proposed rule are one-time administrative tasks that are routine in nature and will not result in an increase or decrease in program costs.

Mr. Couvillon has determined that for each year of the first five years the proposed rule is in effect, there will be a loss in revenue to the State as a result of enforcing or administering the rule. The proposed rule will reduce the renewal fee for a barber instructor license from \$65 to \$55, and the renewal fee for a specialty instructor license from \$65 to \$30. The lost revenue from reducing renewal fees is estimated to be \$2,170 per year for the next five fiscal years. However, at some point before September 1, 2023, the Department will cease issuing instructor licenses, and instructors will transition to holding individual practitioner licenses.

Mr. Couvillon has determined that for each year of the first five years the proposed rule is in effect, there is no estimated increase in revenue to the State as a result of enforcing or administering the proposed rule.

Mr. Couvillon has determined that for each year of the first five years the proposed rule is in effect, enforcing or administering the proposed rule does not have foreseeable implications relating to costs or revenues of local governments. Local governments are not responsible for enforcing or administering the proposed rule.

LOCAL EMPLOYMENT IMPACT STATEMENT

Mr. Couvillon has determined that the proposed rule will not affect the local economy, so the agency is not required to prepare a local employment impact statement under Government Code §2001.022. The reduction of licensing fees will not increase or decrease the number of people instructing barbering in Texas.

PUBLIC BENEFITS

Mr. Couvillon also has determined that for each year of the first five-year period the proposed rule is in effect, the public benefit will be a reduction in fees paid by licensees. Barber instructors will pay \$10 less for each license renewal, and specialty instructors will pay \$35 less for each license renewal. This will ensure that the holder of an instructor license pays the same amount to renew as an individual practitioner license or certificate holder.

PROBABLE ECONOMIC COSTS TO PERSONS REQUIRED TO COMPLY WITH PROPOSAL

Mr. Couvillon has determined that for each year of the first five-year period the proposed rule is in effect, there are no anticipated economic costs to persons who are required to comply with the proposed rule. The proposed rule reduces fees; it does not increase them.

FISCAL IMPACT ON SMALL BUSINESSES, MICRO-BUSINESSES, AND RURAL COMMUNITIES

There will be no adverse economic effect on small businesses, micro-businesses, or rural communities as a result of the proposed rule. Since the agency has determined that the proposed rule will have no adverse economic effect on small businesses, micro-businesses, or rural communities, preparation of an Economic Impact Statement and a Regulatory Flexibility Analysis, as detailed under Texas Government Code §2006.002, is not required.

ONE-FOR-ONE REQUIREMENT FOR RULES WITH A FISCAL IMPACT

The proposed rule does not have a fiscal note that imposes a cost on regulated persons, including another state agency, a special district, or a local government. Therefore, the agency is not required to take any further action under Government Code §2001.0045.

GOVERNMENT GROWTH IMPACT STATEMENT

Pursuant to Government Code §2001.0221, the agency provides the following Government Growth Impact Statement for the proposed rule. For each year of the first five years the proposed rule will be in effect, the agency has determined the following:

1. The proposed rule does not create or eliminate a government program.
2. Implementation of the proposed rule does not require the creation of new employee positions or the elimination of existing employee positions.
3. Implementation of the proposed rule does not require an increase or decrease in future legislative appropriations to the agency.

4. The proposed rule does require an increase or decrease in fees paid to the agency. The proposed rule reduces instructor renewal fees, resulting in a reduction in fees paid to the Department.

5. The proposed rule does not create a new regulation.

6. The proposed rule does not expand, limit, or repeal an existing regulation.

7. The proposed rule does not increase or decrease the number of individuals subject to the rule's applicability.

8. The proposed rule does not positively or adversely affect this state's economy.

TAKINGS IMPACT ASSESSMENT

The Department has determined that no private real property interests are affected by the proposed rule, and the proposed rule does not restrict, limit, or impose a burden on an owner's rights to his or her private real property that would otherwise exist in the absence of government action. As a result, the proposed rule does not constitute a taking or require a takings impact assessment under Government Code §2007.043.

PUBLIC COMMENTS

Comments on the proposed rule may be submitted electronically on the Department's website at <https://ga.tdlr.texas.gov:1443/form/gcerules>; by facsimile to (512) 475-3032; or by mail to Vanessa Vasquez, Legal Assistant, Texas Department of Licensing and Regulation, P.O. Box 12157, Austin, Texas 78711. The deadline for comments is 30 days after publication in the *Texas Register*.

STATUTORY AUTHORITY

The proposed rule is proposed under Texas Occupations Code, Chapters 51, 1601, and 1603, which authorize the Texas Commission of Licensing and Regulation, the Department's governing body, to adopt rules as necessary to implement these chapters and any other law establishing a program regulated by the Department.

The statutory provisions affected by the proposed rule are those set forth in Texas Occupations Code, Chapters 51, 1601, and 1603. No other statutes, articles, or codes are affected by the proposed rule.

§82.80. Fees.

- (a) (No change.)
- (b) Renewal Fees:
 - (1) (No change.)
 - (2) Barber Instructor License--~~\$55~~ [\$65]
 - (3) - (4) (No change.)
 - (5) Specialty Instructor License--Barber Technician, Manicurist, Barber Technician/Manicurist, Barber Technician/Hair Weaving, Hair Weaving--~~\$30~~ [\$65]
 - (6) - (13) (No change.)
- (c) - (j) (No change.)

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Brad Bowman

General Counsel

Texas Department of Licensing and Regulation

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 463-3671



CHAPTER 83. COSMETOLOGISTS

16 TAC §83.80

The Texas Department of Licensing and Regulation (Department) proposes amendments to an existing rule at 16 Texas Administrative Code (TAC), Chapter 83, §83.80, regarding the Cosmetologists Program. These proposed changes are referred to as the "proposed rule."

EXPLANATION OF AND JUSTIFICATION FOR THE RULE

The rules under 16 TAC Chapter 83 implement Texas Occupations Code, Chapters 1602 and 1603.

The proposed rule is necessary to begin implementing House Bill (HB) 1560, 87th Legislature, Regular Session (2021). HB 1560 makes many changes, including combining the Barbers and Cosmetologists program statutes, eliminating instructor licenses, and deregulating wig specialty certificates and wig salons. Under HB 1560, TDLR will discontinue issuing instructor licenses at some point before September 1, 2023, and instructors will transition to holding only the individual practitioner license for their field of instruction. In preparation for that transition, the proposed rule reduces instructor license renewal fees to match the renewal fees for the cosmetology operator and specialty licenses.

Additionally, the proposed rule implements HB 1560 by removing wig specialty certificates from the list of initial application fees and renewal fees.

SECTION-BY-SECTION SUMMARY

The proposed rule amends §83.80 by removing wig specialty certificates from the list of initial application fees and renewal fees; reducing the instructor license renewal fee to \$50; and reducing the instructor specialty license renewal fee to \$50.

FISCAL IMPACT ON STATE AND LOCAL GOVERNMENT

Tony Couvillon, Policy Research and Budget Analyst, has determined that for each year of the first five years the proposed rule is in effect, there are no estimated additional costs or reductions in costs to state government as a result of enforcing or administering the proposed rule. The activities required to implement the proposed rule are one-time administrative tasks that are routine in nature and will not result in an increase or decrease in program costs.

Mr. Couvillon has determined that for each year of the first five years the proposed rule is in effect, there will be a loss in revenue to the State as a result of enforcing or administering the rule. The proposed rule will reduce the renewal fee for a cosmetology instructor license and all cosmetology specialty instructor licenses from \$60 to \$50. Additionally, the proposed rule removes the initial fee and renewal fee for a wig specialty certificate. The lost revenue from eliminating the wig specialty certificate fees and

reducing renewal fees for instructors is estimated to be \$26,970 per year for the next five fiscal years. However, at some point before September 1, 2023, the Department will cease issuing instructor licenses, and instructors will transition to holding individual practitioner licenses.

Mr. Couvillon has determined that for each year of the first five years the proposed rule is in effect, there is no estimated increase in revenue to the State as a result of enforcing or administering the proposed rule.

Mr. Couvillon has determined that for each year of the first five years the proposed rule is in effect, enforcing or administering the proposed rule does not have foreseeable implications relating to costs or revenues of local governments. Local governments are not responsible for enforcing or administering the proposed rule.

LOCAL EMPLOYMENT IMPACT STATEMENT

Mr. Couvillon has determined that the proposed rule will not affect the local economy, so the agency is not required to prepare a local employment impact statement under Government Code §2001.022. The reduction and elimination of licensing fees will not increase or decrease the number of people instructing cosmetology or performing wig services in Texas.

PUBLIC BENEFITS

Mr. Couvillon also has determined that for each year of the first five-year period the proposed rule is in effect, the public benefit will be a reduction in fees paid by licensees. Cosmetology instructors will pay \$10 less for each license renewal. This will ensure that the holder of an instructor license pays the same amount to renew as an individual practitioner license holder. Additionally, removing the fee amounts for wig specialty certificates may help communicate to potential applicants that wig specialty certificates are no longer being issued.

PROBABLE ECONOMIC COSTS TO PERSONS REQUIRED TO COMPLY WITH PROPOSAL

Mr. Couvillon has determined that for each year of the first five-year period the proposed rule is in effect, there are no anticipated economic costs to persons who are required to comply with the proposed rule. The proposed rule reduces or eliminates fees; it does not increase them.

FISCAL IMPACT ON SMALL BUSINESSES, MICRO-BUSINESSES, AND RURAL COMMUNITIES

There will be no adverse economic effect on small businesses, micro-businesses, or rural communities as a result of the proposed rule. Since the agency has determined that the proposed rule will have no adverse economic effect on small businesses, micro-businesses, or rural communities, preparation of an Economic Impact Statement and a Regulatory Flexibility Analysis, as detailed under Texas Government Code §2006.002, is not required.

ONE-FOR-ONE REQUIREMENT FOR RULES WITH A FISCAL IMPACT

The proposed rule does not have a fiscal note that imposes a cost on regulated persons, including another state agency, a special district, or a local government. Therefore, the agency is not required to take any further action under Government Code §2001.0045.

GOVERNMENT GROWTH IMPACT STATEMENT

Pursuant to Government Code §2001.0221, the agency provides the following Government Growth Impact Statement for the proposed rule. For each year of the first five years the proposed rule will be in effect, the agency has determined the following:

1. The proposed rule does not create or eliminate a government program.
2. Implementation of the proposed rule does not require the creation of new employee positions or the elimination of existing employee positions.
3. Implementation of the proposed rule does not require an increase or decrease in future legislative appropriations to the agency.
4. The proposed rule does require an increase or decrease in fees paid to the agency. The proposed rule reduces instructor renewal fees and eliminates fees for wig specialty certificates, resulting in a reduction in fees paid to the Department.
5. The proposed rule does not create a new regulation.
6. The proposed rule does not expand, limit, or repeal an existing regulation.
7. The proposed rule does increase or decrease the number of individuals subject to the rule's applicability. The proposed rule implements HB 1560, which eliminates wig specialty certificates. Persons currently holding wig specialty certificates will no longer be required to obtain the certificate or pay the fee associated with the certificate.
8. The proposed rule does not positively or adversely affect this state's economy.

TAKINGS IMPACT ASSESSMENT

The Department has determined that no private real property interests are affected by the proposed rule, and the proposed rule does not restrict, limit, or impose a burden on an owner's rights to his or her private real property that would otherwise exist in the absence of government action. As a result, the proposed rule does not constitute a taking or require a takings impact assessment under Government Code §2007.043.

PUBLIC COMMENTS

Comments on the proposed rule may be submitted electronically on the Department's website at <https://ga.tdlr.texas.gov:1443/form/gcerules>; by facsimile to (512) 475-3032; or by mail to Vanessa Vasquez, Legal Assistant, Texas Department of Licensing and Regulation, P.O. Box 12157, Austin, Texas 78711. The deadline for comments is 30 days after publication in the *Texas Register*.

STATUTORY AUTHORITY

The proposed rule is proposed under Texas Occupations Code, Chapters 51, 1602, and 1603, which authorize the Texas Commission of Licensing and Regulation, the Department's governing body, to adopt rules as necessary to implement these chapters and any other law establishing a program regulated by the Department.

The statutory provisions affected by the proposed rule are those set forth in Texas Occupations Code, Chapters 51, 1602, and 1603. No other statutes, articles, or codes are affected by the proposed rule.

§83.80. *Fees.*

- (a) Application fees.

- (1) - (2) (No change.)
- (3) Specialty Certificate--Hair Weaving[~~3~~, Wig]--\$50
- (4) - (13) (No change.)
- (b) Renewal fees.
 - (1) - (2) (No change.)
 - (3) Specialty Certificate--Hair Weaving[~~3~~, Wig]--\$50
 - (4) Instructor License--~~\$50~~ [\$60]
 - (5) Instructor Specialty License--Esthetician, Manicurist, Esthetician/Manicure, Eyelash Extension--~~\$50~~ [\$60]
 - (6) - (12) (No change.)
- (c) - (I) (No change.)

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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 Brad Bowman
 General Counsel
 Texas Department of Licensing and Regulation
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 For further information, please call: (512) 463-3671



TITLE 19. EDUCATION
PART 2. TEXAS EDUCATION AGENCY
CHAPTER 62. COMMISSIONER'S RULES
CONCERNING OPTIONS FOR LOCAL
REVENUE LEVELS IN EXCESS OF
ENTITLEMENT

19 TAC §62.1001, §62.1072

(Editor's note: In accordance with Texas Government Code, §2002.014, which permits the omission of material which is "cumbersome, expensive, or otherwise inexpedient," the figure in 19 TAC §62.1072 is not included in the print version of the Texas Register. The figure is available in the on-line version of the October 8, 2021, issue of the Texas Register.)

The Texas Education Agency (TEA) proposes amendments to §62.1001 and §62.1072, concerning options for local revenue levels in excess of entitlement. The proposed amendment to §62.1001 would remove language that prohibits a school district's board of trustees from delegating certain authority. The proposed amendment to §62.1072 would adopt as a part of the Texas Administrative Code (TAC) the official TEA publications *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2021-2022 School Year* and *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2022-2023 School Year*. The manuals contain the processes and procedures that TEA will use in the administration of the provisions of Texas Education Code (TEC), Chapter 49,

and the fiscal, procedural, and administrative requirements that school districts subject to TEC, Chapter 49, must meet.

BACKGROUND INFORMATION AND JUSTIFICATION: The following changes would be made to Chapter 62.

§62.1001, Authority of Trustees; Duration of Agreements

The agreement for purchase of attendance credit authorized under TEC, Chapter 49, is an electronic document accessible via the Excess Local Revenue subsystem of the online Foundation School Program (FSP) System. Each year, a school district's board of trustees must delegate authority to obligate the district under TEC, Chapter 49, to the superintendent to facilitate the submission of the agreement through the Excess Local Revenue subsystem. The proposed amendment to §62.1001(a) would align with TEA's automated process for districts submitting this agreement by removing language that prohibits a school district's board of trustees from delegating authority to enter into agreements necessary to achieve the purposes of TEC, Chapter 49.

§62.1072, Options and Procedures for Local Revenue in Excess of Entitlement, 2019-2020 and 2020-2021 School Years

The procedures contained in each yearly manual for districts determined to have local revenue in excess of entitlement are adopted as part of the TAC. The intent is to biennially update §62.1072 to refer to the most recently published manuals. Manuals adopted for previous school years will remain in effect with respect to those school years.

The proposed amendment to §62.1072 would adopt in rule the official TEA publications *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2021-2022 School Year* as Figure: 19 TAC §62.1072(a) and *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2022-2023 School Year* as Figure: 19 TAC §62.1072(b). The section title would be updated to reflect the manuals adopted in the rule.

Each school year's options and procedures for districts determined to have local revenue in excess of entitlement explain how districts subject to excess local revenue are identified; the fiscal, procedural, and administrative requirements those districts must meet; and the consequences for not meeting requirements. The options and procedures also provide information on using the online FSP System to fulfill certain requirements.

The following significant changes are addressed in the updated publications pursuant to TEC, Chapter 49, as amended by House Bill 1525, 87th Texas Legislature, Regular Session, 2021.

Netting Provision

Provisions in TEC, §48.257(c), were amended to allow districts to offset the reduction of excess local revenue against TEC, Chapter 48, funds. All districts will have the option to use state aid calculated under TEC, Chapter 48, that is not described by TEC, §48.266(a)(3), as an offset to their attendance credit for purposes of reducing their local revenue level. Districts using this option are required to submit the district intent/choice selection form and complete an Option 3 netting agreement.

Local Revenue in Excess of Entitlement After Review Notification

If the commissioner determines that a district has a local revenue level in excess of entitlement after the date of notification for the current school year under TEC, §49.004, the amount of the

district's local revenue level that exceeds the level established under TEC, §48.257, for that school year will be included in the annual review for the following school year of the district's local revenue levels under TEC, §49.004(a).

FISCAL IMPACT: Leo Lopez, associate commissioner for school finance, has determined that for the first five-year period the proposal is in effect there are no additional costs to state or local government, including school districts and open-enrollment charter schools, required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis, specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would limit an existing regulation in §62.1001(a) by removing language that prohibits a school district's board of trustees from delegating authority to enter into agreements necessary to achieve the purposes of TEC, Chapter 49. This change is necessary to align with TEA's automated process for districts submitting an agreement for purchase of attendance credit through the Excess Local Revenue subsystem of the online FSP System. The proposed rulemaking would also expand an existing regulation in §62.1072 by specifying that if the commissioner determines that a district has a local revenue level in excess of entitlement after the date of notification for the current school year under TEC, §49.004, the amount of the district's local revenue level that exceeds the level established under the TEC, §48.257, for that school year will be included in the annual review for the following school year of the district's local revenue levels under the TEC, §49.004(a).

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not create a new regulation; would not repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: Mr. Lopez has determined that for each year of the first five years the proposal is in effect, the public benefit anticipated as a result of enforcing the proposal would be continuing to inform the public of the existence of annual publications specifying the specific processes, procedures, and requirements used in the manuals for districts with local revenue in excess of entitlement that are established

biennially by the commissioner of education and communicated to all school districts. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would place the specific procedures contained in the publications *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2021-2022 School Year* and *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2022-2023 School Year* in the TAC. TEA administers the options for local revenue in excess of entitlement of the TEC, Chapter 49, according to the procedures specified in each yearly manual for districts with excess local revenue. Data reporting requirements are addressed primarily through the online FSP System.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins October 8, 2021, and ends November 8, 2021. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the Texas Register on October 8, 2021. A form for submitting public comments is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_\(TAC\)/Proposed_Commissioner_of_Education_Rules/](https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_(TAC)/Proposed_Commissioner_of_Education_Rules/).

STATUTORY AUTHORITY. The amendments are proposed under Texas Education Code (TEC), §49.006, which authorizes the commissioner of education to adopt rules necessary for the implementation of TEC, Chapter 49, Options for Local Revenue Levels in Excess of Entitlement.

CROSS REFERENCE TO STATUTE. The amendments implement Texas Education Code, §49.006.

§62.1001. Authority of Trustees; Duration of Agreements.

(a) Trustees of independent school districts may not [delegate their authority to enter into agreements necessary to achieve the purposes of the Texas Education Code, Chapter 49. Nor may the trustees] authorize any exclusive franchises on the right to negotiate on behalf of the district.

(b) Consolidations under the Texas Education Code, Chapter 49, Subchapter B; detachments and annexations under Subchapter C; and tax base consolidations under Subchapter F are permanent in duration and districts may not enter into agreements that purport to limit the duration of the agreement. Nor may the parties create by agreement any right to cancel the agreement.

§62.1072. Options and Procedures for Local Revenue in Excess of Entitlement, 2021-2022 and 2022-2023 [2019-2020 and 2020-2021] School Years.

(a) For the 2021-2022 [2019-2020] school year, the processes and procedures that the Texas Education Agency (TEA) will use in the administration of the provisions of the Texas Education Code (TEC), Chapter 49, and the fiscal, procedural, and administrative requirements that school districts subject to the TEC, Chapter 49, must meet are described in the official TEA publication *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2021-2022 [2019-2020] School Year*, provided in this subsection.

Figure: 19 TAC §62.1072(a)

[Figure: 19 TAC §62.1072(a)]

(b) For the 2022-2023 [2020-2021] school year, the processes and procedures that the TEA will use in the administration of the provisions of the TEC, Chapter 49, and the fiscal, procedural, and administrative requirements that school districts subject to the TEC, Chapter 49, must meet are described in the official TEA publication *Options and Procedures for Districts with Local Revenue in Excess of Entitlement 2022-2023 [2020-2021] School Year*, provided in this subsection. Figure: 19 TAC §62.1072(b)
[Figure: 19 TAC §62.1072(b)]

(c) The specific processes, procedures, and requirements used in the manuals for districts with local revenue in excess of entitlement [subject to wealth equalization] are established biennially by the commissioner of education and communicated to all school districts.

(d) School district actions and inactions in previous school years and data from those school years will continue to be subject to the annual manual for districts with local revenue in excess of entitlement [subject to wealth equalization] with respect to those years.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103819

Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 475-1497



CHAPTER 74. CURRICULUM REQUIREMENTS

SUBCHAPTER CC. COMMISSIONER'S RULES CONCERNING READING PRACTICES

19 TAC §74.2001

The Texas Education Agency (TEA) proposes new §74.2001, concerning reading practices. The proposed new rule would implement statutory requirements for a phonics curriculum as required by House Bill (HB) 3, 86th Texas Legislature, 2019.

BACKGROUND INFORMATION AND JUSTIFICATION: Texas Education Code (TEC), §28.0062, as added by HB 3, 86th Texas Legislature, 2019, requires school districts and charter schools to provide for the use of a phonics curriculum that uses systematic direct instruction in Kindergarten-Grade 3 to ensure all students obtain necessary early literacy skills.

Proposed new §74.2001 would implement TEC, §28.0062, and outline the required components of a phonics curriculum.

FISCAL IMPACT: Monica Martinez, associate commissioner for standards and support services, has determined that for the first five-year period the proposal is in effect there are no additional costs to state or local government, including school districts and open-enrollment charter schools, required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis, specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create a new regulation by implementing statutory requirements for implementation of a phonics curriculum.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: Ms. Martinez has determined that for each year of the first five years the proposal is in effect, the public benefit anticipated as a result of enforcing the proposal would be implementing the statutory requirements for strong reading standards for Kindergarten-Grade 3. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins October 8, 2021, and ends November 8, 2021. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the Texas Register on October 8, 2021. A form for submitting public comments is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_\(TAC\)/Proposed_Commissioner_of_Education_Rules/](https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_(TAC)/Proposed_Commissioner_of_Education_Rules/).

STATUTORY AUTHORITY. The new section is proposed under Texas Education Code (TEC), §28.0062, as added by House Bill 3, 86th Texas Legislature, 2019, which requires school districts and charter schools to provide for the use of a phonics curriculum that uses systematic direct instruction in Kindergarten through

third grade to ensure all students obtain necessary early literacy skills. TEC, §28.0062(e), permits the commissioner to adopt rules to implement these requirements.

CROSS REFERENCE TO STATUTE. The new section implements Texas Education Code, §28.0062.

§74.2001. Phonics Curriculum.

(a) The following words and terms, when used in this subchapter, shall have the following meanings.

(1) Systematic instruction--Instruction that is carefully planned and sequenced where simple concepts are taught first before progressing to more complex concepts. This form of instruction is broken down into manageable step-by-step pieces that are aligned to instructional goals.

(2) Direct instruction--Explicit, teacher-led instruction that clearly and specifically teaches a skill through concise explanation, modeling, practice, and feedback.

(3) Phonics--The ability to read (decode) and spell (encode) individual words. Decoding refers to the process of using letter-sound knowledge to blend sounds and word parts to read words. Encoding refers to the process of using letter-sound knowledge to spell words.

(b) Each school district and open-enrollment charter school shall adopt a phonics curriculum for Kindergarten-Grade 3.

(1) A phonics curriculum must:

(A) align with the developing and sustaining foundational language skills portion of the Texas Essential Knowledge and Skills for English Language Arts and Reading or Texas Essential Knowledge and Skills for Spanish Language Arts and Reading for the applicable grade level in Kindergarten-Grade 3;

(B) align with current and confirmed research in reading and cognitive science;

(C) provide concise, direct, explicit, and systematic phonics instruction with cumulative review;

(D) provide specific daily instructional sequences and routines, which include modeling, guided practice, and application with immediate, corrective feedback;

(E) include ongoing practice opportunities in isolation and in connected, controlled text that follows the instructional focus;

(F) include assessments to measure and monitor student progress;

(G) provide specific guidance after monitoring progress to support students in reaching mastery of a concept or to accelerate instruction as needed; and

(H) include the quality components addressed in a phonics-specific rubric approved by the commissioner of education for use in the Texas Resource Review.

(2) The program may:

(A) function as a stand-alone phonics program, be part of a core language arts program, or act as a supplemental foundational literacy skills program; and

(B) include scaffolded application in specific daily instructional sequences and routines.

(3) The program may not:

(A) teach word recognition through visual memory, guessing, the shape of a word, or the use of pictures or context clues to decode words instead of explicitly teaching words that cannot be sounded out and that do not follow the rules of phonics; or

(B) be used solely for intervention purposes rather than for core instruction implementation.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

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For further information, please call: (512) 475-1497



CHAPTER 97. PLANNING AND
ACCOUNTABILITY
SUBCHAPTER EE. ACCREDITATION
STATUS, STANDARDS, AND SANCTIONS
DIVISION 1. STATUS, STANDARDS, AND
SANCTIONS

19 TAC §§97.1055, 97.1057, 97.1059, 97.1072, 97.1073

The Texas Education Agency (TEA) proposes amendments to §§97.1055, 97.1057, 97.1059, 97.1072, and 97.1073, concerning accreditation status, standards, and sanctions. The proposed amendments would modify the rules to clarify the applicability of a district's last issued accreditation status during years in which a district's accreditation status is withheld pending completion of an appeal or review and to indicate which academic accountability ratings and accreditation statuses are consecutive as a result of the learning disruptions caused by the COVID-19 pandemic. The proposed amendments would also implement Senate Bill (SB) 1365, 87th Texas Legislature, Regular Session, 2021, by reflecting changes related to the Not Rated accountability rating and updating statutory references.

BACKGROUND INFORMATION AND JUSTIFICATION: Section 97.1055(a)(1) requires the commissioner to annually assign each school district an accreditation status. Subsections (a)(1)(A) and (b)-(e) set forth the requirements a school district must meet each school year to receive the status of Accredited and states how the accreditation statuses of Accredited-Warning, Accredited-Probation, and Not Accredited-Revoked are determined.

The proposed amendment to §97.1055 would add new subsection (a)(8) to clarify that when a district's accreditation status is withheld pending completion of an appeal or review, the district's last issued accreditation status remains in effect until otherwise finalized or changed. The subsequent paragraphs would be renumbered due to the addition of proposed new subsection (a)(8).

Due to the learning disruptions caused by the extraordinary public health and safety circumstances related to COVID-19, academic accountability ratings were not issued for the 2019-2020 and 2020-2021 school years. The proposed amendment to §97.1055 would amend renumbered subsection (a)(10) to clarify that the academic accountability ratings issued for the 2018-2019 and 2021-2022 school years are consecutive when determining multiple years of academically unacceptable or insufficient performance for the purposes of accreditation. In addition, renumbered subsection (a)(12) would be amended to clarify that accreditation statuses issued for the 2019-2020 and 2022-2023 school years are consecutive.

Due to the passage of SB 1365, 87th Texas Legislature, Regular Session, 2021, the proposed amendment to §97.1055 would incorporate the accountability label of Not Rated as it relates to the commissioner's authority to withhold the assignment of an accreditation status or withdraw a previously issued accreditation status. Previously, only the label of Not Rated-Data Integrity was specified in this section. SB 1365 enables the commissioner to assign an accountability rating of Not Rated for reasons inclusive of but not limited to data integrity. The proposed amendment to renumbered subsections (a)(13) and (14) would reflect this change and clarify that when a rating of Not Rated or similar rating is issued to a school district, the commissioner may withhold or withdraw a previously issued accreditation rating. In the following school year, the commissioner will issue an accreditation rating based on the applicable school years.

The proposed amendments to §§97.1055, 97.1057, 97.1059, and 97.1073 would update statutory references to align with SB 1365, 87th Texas Legislature, Regular Session, 2021, which recodified Texas Education Code (TEC), Chapter 39, §39.057, into TEC, Chapter 39, §39.003, and changed "Special Accreditation Investigation" to "Special Investigation." In addition, the proposed amendments to §97.1059 and §97.1072 would update a cross reference title to 19 TAC §97.1071.

FISCAL IMPACT: Jeff Cottrill, deputy commissioner for governance and accountability, has determined that for the first five-year period the proposal is in effect there are no additional costs to state or local government, including school districts and open-enrollment charter schools, required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis, specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would limit and expand an existing regulation. The proposed rulemaking would limit the requirement that

the agency issue accreditation statuses annually by enabling the agency not to assign statuses for the 2021-2022 school year due to the lack of implementation of academic accountability ratings for the 2020-2021 school year and for any year during which a rating of Not Rating is issued to a school district. The proposed rulemaking would expand an existing regulation by clarifying that academic accountability ratings for the 2018-2019 and 2021-2022 school years will be consecutive for the purposes of determining multiple years of unacceptable or insufficient academic performance and that the accreditation statuses issued for the 2019-2020 and 2022-2023 school years will be consecutive.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not create a new regulation; would not repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: Dr. Cottrill has determined that for each year of the first five years the proposal is in effect, the public benefit anticipated as a result of enforcing the proposal would be ensure that school districts continue to receive an accreditation status on an annual basis and provide a clear process by which the agency will assign statuses in years in which the applicable ratings used to determine statuses are not issued. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins October 8, 2021, and ends November 8, 2021. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the Texas Register on October 8, 2021. A form for submitting public comments is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_\(TAC\)/Proposed_Commissioner_of_Education_Rules/](https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_(TAC)/Proposed_Commissioner_of_Education_Rules/).

STATUTORY AUTHORITY. The amendments are proposed under Texas Education Code (TEC), §39.051, which requires the commissioner to determine accreditation statuses; TEC, §39.052, which establishes the requirements for the commissioner to consider when determining accreditation statuses; and TEC §39.054(a-5), as added by Senate Bill 1365, 87th Texas Legislature, Regular Session, 2021, which states that when a "not rated" rating is issued, the "not rated" rating is not included in the count of consecutive unacceptable ratings and is also not considered to be a break in the count of consecutive unacceptable ratings.

CROSS REFERENCE TO STATUTE. The amendments implement Texas Education Code, TEC, §§39.051, 39.052, and 39.054(a-5).

§97.1055. *Accreditation Status.*

(a) General provisions.

(1) Each year, the commissioner of education shall assign to each school district an accreditation status under Texas Education Code (TEC), §39.052(b) and (c). Each district shall be assigned a status defined as follows.

(A) Accredited. Accredited means the Texas Education Agency (TEA) recognizes the district as a public school of this state that:

(i) meets the standards determined by the commissioner under TEC, §39.052(b) and (c), and specified in §97.1059 of this title (relating to Standards for All Accreditation Sanction Determinations); and

(ii) is not currently assigned an accreditation status of Accredited-Warned or Accredited-Probation.

(B) Accredited-Warned. Accredited-Warned means the district exhibits deficiencies in performance, as specified in subsection (b) of this section, that, if not addressed, will lead to probation or revocation of its accreditation status.

(C) Accredited-Probation. Accredited-Probation means the district exhibits deficiencies in performance, as specified in subsection (c) of this section, that must be addressed to avoid revocation of its accreditation status.

(D) Not Accredited-Revoked. Not Accredited-Revoked means the TEA does not recognize the district as a Texas public school because the district's performance has failed to meet standards adopted by the commissioner under TEC, §39.052(b) and (c), and specified in subsection (d) of this section.

(2) The commissioner shall assign the accreditation status, as defined by this section, based on the performance of each school district. This section shall be construed and applied to achieve the purposes of TEC, §39.051 and §39.052, which are specified in §97.1053(a) of this title (relating to Purpose).

(3) The commissioner shall revoke the accreditation status of a district that fails to meet the standards specified in this section. In the event of revocation, the purposes of the TEC, §39.051 and §39.052, are to:

(A) inform the parents of students enrolled in the district, property owners in the district, general public, and policymakers that the TEA does not recognize the district as a Texas public school because the district's performance has failed to meet standards adopted by the commissioner under TEC, §39.052(b) and (c), and specified in subsection (d) of this section; and

(B) encourage other districts to improve their performance so as to retain their accreditation.

(4) Unless revised as a result of investigative activities by the commissioner as authorized under TEC, Chapter 39 or 39A, or other law, an accreditation status remains in effect until replaced by an accreditation status assigned for the next school year. An accreditation status shall be revised within the school year when circumstances require such revision in order to achieve the purposes specified in §97.1053(a) of this title.

(5) An accreditation status will be withheld pending completion of any appeal or review of an academic accountability rating, a

financial accountability rating, or other determination by the commissioner, but only if such appeal or review is:

(A) specifically authorized by commissioner rule;

(B) timely requested under and in compliance with such rule; and

(C) applicable to the accreditation status under review.

(6) An accreditation status may be withheld pending completion of on-site or other investigative activities in order to achieve the purposes specified in §97.1053(a) of this title.

(7) The commissioner may withhold the assignment of an accreditation status to an open-enrollment charter school that is subject to TEC, §12.115(c) or §12.1141(d), or has otherwise surrendered its charter.

(8) If an accreditation status is withheld pending completion of an appeal or review as provided by this section, the district's last issued accreditation status remains in effect until otherwise finalized or changed.

(9) ~~[(8)]~~ An accreditation status may be raised or lowered based on the district's performance or may be lowered based on the performance of one or more campuses in the district that is below a standard required under this chapter or other applicable law.

(10) ~~[(9)]~~ For purposes of determining multiple years of academically unacceptable or insufficient performance, the academic accountability ratings issued for the 2010-2011 school year and for the 2012-2013 school year are consecutive. An accreditation status assigned for the 2012-2013 school year shall be based on assigned academic accountability ratings for the applicable prior school years, as determined under subsections (b)-(d) of this section. Additionally, for purposes of determining multiple years of academically unacceptable or insufficient performance, the academic accountability ratings issued for the 2018-2019 school year and for the 2021-2022 ~~[2020-2021]~~ school year are consecutive. An accreditation status assigned for the 2022-2023 ~~[2020-2021]~~ school year shall be based on assigned academic and financial accountability ratings for the applicable prior school years, as determined under subsections (b)-(d) of this section.

(11) ~~[(10)]~~ If a lowered accreditation status is assigned and a sanction is imposed, the subsequent issuance of a new accreditation status does not affect the commissioner's authority to proceed with the previously imposed sanction.

(12) ~~[(11)]~~ Accreditation statuses are consecutive if they are not separated by an accreditation period in which the TEA assigned accreditation statuses to districts and charter schools generally. For example, if TEA does not assign accreditation statuses to districts and charter schools generally for the 2012-2013 school year, then the accreditation statuses issued for the 2011-2012 school year and for the 2013-2014 school year are consecutive. Additionally, if TEA does not assign accreditation statuses to districts and charter schools generally for the 2020-2021 school year, then the accreditation statuses issued for the 2019-2020 school year and for the 2022-2023 ~~[2021-2022]~~ school year are consecutive.

(13) ~~[(12)]~~ If a rating of Not Rated [~~Data Integrity~~] or similar rating is issued to a school district, the commissioner may withhold the assignment of an accreditation status or withdraw a previously issued accreditation status. For purposes of determining multiple years of unacceptable or insufficient performance, the rating issued for the prior and subsequent school year are consecutive. The next accreditation status assigned shall be based on assigned accountability ratings for the applicable prior school years, as determined under subsections (b)-(d) of this section.

(14) [(13)] When an accreditation status is withheld because either a financial or academic accountability rating is not available or the district is not rated [due to data integrity], the commissioner may, but is not required to, consider the rating that is issued when assigning subsequent accreditation statuses in order to achieve the purposes specified in §97.1053(a) of this title. If the commissioner elects not to consider a rating, then the previous and subsequent rating is consecutive.

(b) Determination of Accredited-Warning status.

(1) A district shall be assigned Accredited-Warning status if the district is assigned:

(A) for two consecutive school years, an unacceptable academic accountability rating as indicated in the applicable year's accountability manual adopted under §97.1001 of this title (relating to Accountability Rating System);

(B) for two consecutive school years, a financial accountability rating of Substandard Achievement as indicated in the applicable year's financial accountability system manual adopted under §109.1001 of this title (relating to Financial Accountability Ratings);

(C) for two consecutive school years, any one of the ratings referenced in subparagraphs (A) and (B) of this paragraph; or

(D) for one school year, a combination of ratings referenced in both subparagraphs (A) and (B) of this paragraph.

(2) Notwithstanding the district's performance under paragraph (1) of this subsection, a district shall be assigned Accredited-Warning status if the commissioner determines this action is reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052. Such action is generally required by the following circumstances:

(A) to an extent established under subsection (e) of this section, the district has failed to comply with requirements related to:

(i) the integrity of assessment or financial data used to measure performance under TEC, Chapter 39, 39A, or 48, and rules implementing those chapters;

(ii) the reporting of data under TEC, §48.008, and §61.1025 of this title (relating to Public Education Information Management System (PEIMS) Data and Reporting Standards);

(iii) other reports required by state or federal law or court order;

(iv) awarding high school graduation under TEC, §28.025; or

(v) any applicable requirement under TEC, §7.056(e)(3)(C)-(I); or

(B) after review and/or investigation under TEC, §39.003 or §39.056 [or §39.057], the commissioner finds:

(i) the district's programs monitored under §97.1005 of this title (relating to Results Driven Accountability) exhibit serious or persistent deficiencies that, if not addressed, may lead to probation or revocation of the district's accreditation; or

(ii) the district otherwise exhibits serious or persistent deficiencies that, if not addressed, may lead to probation or revocation of the district's accreditation.

(3) Notwithstanding paragraph (2) of this subsection, a district shall be assigned Accredited-Warning status if the commissioner determines this action is reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052.

(c) Determination of Accredited-Probation status.

(1) A district shall be assigned Accredited-Probation status if the district is assigned:

(A) for three consecutive school years, an unacceptable academic accountability rating as indicated in the applicable year's accountability manual adopted under §97.1001 of this title;

(B) for three consecutive school years, a financial accountability rating of Substandard Achievement as indicated in the applicable year's financial accountability system manual adopted under §109.1001 of this title;

(C) for three consecutive school years, any one of the ratings referenced in subparagraphs (A) and (B) of this paragraph; or

(D) for two consecutive school years, a combination of ratings referenced in both subparagraphs (A) and (B) of this paragraph.

(2) Notwithstanding the district's performance under paragraph (1) of this subsection, a district shall be assigned Accredited-Probation status if the commissioner determines this action is reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052. Such action is generally required by the following circumstances:

(A) to an extent established under subsection (e) of this section, the district has failed to comply with requirements related to:

(i) the integrity of assessment or financial data used to measure performance under TEC, Chapter 39, 39A, or 48, and rules implementing those chapters;

(ii) the reporting of data under TEC, §48.008, and §61.1025 of this title;

(iii) other reports required by state or federal law or court order;

(iv) awarding high school graduation under TEC, §28.025; or

(v) any applicable requirement under TEC, §7.056(e)(3)(C)-(I); or

(B) after review and/or investigation under TEC, §39.003 or §39.056 [or §39.057], the commissioner finds:

(i) the district's programs monitored under §97.1005 of this title exhibit serious or persistent deficiencies that, if not addressed, may lead to revocation of the district's accreditation; or

(ii) the district otherwise exhibits serious or persistent deficiencies that, if not addressed, may lead to revocation of the district's accreditation.

(3) Notwithstanding paragraph (2) of this subsection, a district shall be assigned Accredited-Probation status if the commissioner determines this action is reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052.

(d) Determination of Not Accredited-Revoked status; Revocation of accreditation.

(1) The accreditation of a district shall be revoked if the district is assigned:

(A) for four consecutive school years, an unacceptable academic accountability rating as indicated in the applicable year's accountability manual adopted under §97.1001 of this title;

(B) for four consecutive school years, a financial accountability rating of Substandard Achievement as indicated in the ap-

plicable year's financial accountability system manual adopted under §109.1001 of this title;

(C) for four consecutive school years, any one of the ratings referenced in subparagraphs (A) and (B) of this paragraph; or

(D) for three consecutive school years, a combination of ratings referenced in both subparagraphs (A) and (B) of this paragraph.

(2) Notwithstanding paragraph (1) of this subsection, the commissioner may abate the assignment of a Not Accredited-Revoked status, issue another accreditation status, or elect to appoint a board of managers to govern the district in lieu of revoking the district's accreditation if the commissioner determines that revocation of the district's accreditation is not reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052.

(3) Notwithstanding this section, if the commissioner appoints a board of managers under paragraph (2) of this subsection or as a result of a special [a~~cc~~reditation] investigation, the commissioner shall assign the district accreditation statuses during the period of the appointment of the board of managers as follows.

(A) In the school year following the appointment of the board of managers, the commissioner shall assign the district an accreditation status of Accredited.

(B) In the school years following the issuance of the accreditation rating under subparagraph (A) of this paragraph, the commissioner shall assign the accreditation status as provided by subsections (a)-(d) of this section. However, the commissioner shall not consider any academic rating that was issued for a school year in which the district was operated, in whole or in part, by the suspended board of trustees. The commissioner shall also not consider any financial accountability rating that was issued based on financial data from a fiscal year in which the district was operated, in whole or in part, by the suspended board of trustees. Notwithstanding this provision, the commissioner may consider academic or financial ratings attributable to performance that occurred in a school year in which the district was operated, in whole or in part, by the suspended board of trustees if the commissioner, in his sole discretion, determines such consideration is necessary to achieve the purposes of TEC, §39.051 and §39.052.

(C) For any district subject to this paragraph, the commissioner may lower the district's accreditation rating to Not Accredited-Revoked at any time if the commissioner determines that the district is not making acceptable progress to correct its academic or financial performance and that closure and annexation is necessary to achieve the purposes of TEC, §39.051 and §39.052, unless the district has earned an Accredited status absent the application of subparagraph (A) or (B) of this paragraph.

(D) For purposes of this subsection, the period of appointment of the board of managers includes any school year in which any member of the board of managers serves, including the school year during which the appointment of the board of managers expires.

(4) A district shall have its accreditation revoked if, notwithstanding its performance under paragraph (1) of this subsection, the commissioner determines this action is reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052. Such action is generally required by the following circumstances:

(A) to an extent established under subsection (e) of this section, the district has failed to comply with requirements related to:

(i) the integrity of assessment or financial data used to measure performance under TEC, Chapter 39, 39A, or 48, and rules implementing those chapters;

(ii) the reporting of data under TEC, §48.008, and §61.1025 of this title;

(iii) other reports required by state or federal law or court order;

(iv) awarding high school graduation under TEC, §28.025; or

(v) any applicable requirement under TEC, §7.056(e)(3)(C)-(I); or

(B) after review and/or investigation under TEC, §39.003 or §39.056 [or §39.057], the commissioner finds:

(i) the district's programs monitored under §97.1005 of this title exhibit serious or persistent deficiencies that require revocation of the district's accreditation; or

(ii) the district otherwise exhibits serious or persistent deficiencies that require revocation of the district's accreditation.

(5) Notwithstanding paragraph (3) of this subsection, a district's accreditation shall be revoked if the commissioner determines this action is reasonably necessary to achieve the purposes of TEC, §39.051 and §39.052.

(6) The commissioner's decision to revoke a district's accreditation may be reviewed under Chapter 157, Subchapter EE, of this title (relating to Informal Review, Formal Review, and Review by State Office of Administrative Hearings). If, after review, the decision is sustained, the commissioner shall appoint a management team or board of managers to bring to closure the district's operation of the public school.

(7) Issuance of an accreditation status of Not Accredited-Revoked does not invalidate a diploma awarded, course credit earned, or grade promotion granted by a school district before the effective date of the annexation of the district.

(e) Legal compliance. In addition to the district's performance as measured by ratings under §97.1001 and §109.1001 of this title, the accreditation status of a district is determined by its compliance with the statutes and rules specified in TEC, §39.052(b)(2). Notwithstanding satisfactory or above satisfactory performance on other measures, a district's accreditation status may be assigned based on its legal compliance alone, to the extent the commissioner determines necessary. In making this determination, the commissioner:

(1) shall assign the accreditation status that is reasonably calculated to accomplish the applicable provisions specified in §97.1053(a) of this title;

(2) may impose, but is not required to impose, an accreditation sanction under this subchapter in addition to assigning a status under paragraph (1) of this subsection; and

(3) shall lower the status assigned and/or impose additional accreditation sanctions as necessary to achieve compliance with the statutes and rules specified in TEC, §39.052(b)(2).

(f) Required notification of Accredited-Warned, Accredited-Probation, or Not Accredited-Revoked status.

(1) A district assigned an accreditation status of Accredited-Warned, Accredited-Probation, or Not Accredited-Revoked shall notify the parents of students enrolled in the district and property owners in the district as specified by this subsection.

(2) The district's notice must contain information about the accreditation status, the implications of such status, and the steps the district is taking to address the areas of deficiency identified by the

commissioner. The district's notice shall use the format and language determined by the commissioner.

(3) Notice under this subsection must:

(A) not later than 30 calendar days after the accreditation status is assigned, appear on the home page of the district's website, with a link to the notification required by paragraph (2) of this subsection, and remain until the district is assigned the Accredited status; and

(B) appear in a newspaper of general circulation, as defined in §97.1051 of this title (relating to Definitions), in the district for three consecutive days as follows:

(i) from Sunday through Tuesday of the second week following assignment of the status; or

(ii) if the newspaper is not published from Sunday through Tuesday, then for three consecutive issues of the newspaper beginning the second week following assignment of the status; or

(C) not later than 30 calendar days after the status is assigned, be sent by first class mail addressed individually to each parent of a student enrolled in the district and each property owner in the district; or

(D) not later than 30 calendar days after the status is assigned, be presented as a discussion item in a public meeting of the board of trustees conducted at a time and location that allows parents of students enrolled in the district and property owners in the district to attend and provide public comment.

(4) A district required to act under this subsection shall send the following to the TEA via certified mail, return receipt requested:

(A) the universal resource locator (URL) for the link required by paragraph (3)(A) of this subsection; and

(B) copies of the notice required by paragraph (3)(B) of this subsection showing dates of publication, or a paid invoice showing the notice content and its dates of publication; or

(C) copies of the notice required by paragraph (3)(C) of this subsection and copies of all mailing lists and postage receipts; or

(D) copies of the notice required by paragraph (3)(D) of this subsection and copies of the board of trustees meeting notice and minutes for the board meeting in which the notice was presented and publicly discussed.

§97.1057. Interventions and Sanctions; Lowered Rating or Accreditation Status.

(a) The provisions of Texas Education Code (TEC), Chapters 39 and 39A, and this subchapter shall be construed and applied to achieve the purposes of accreditation sanctions, which are specified in §97.1053 of this title (relating to Purpose).

(b) If the commissioner of education finds that a district or campus does not satisfy the accreditation criteria under TEC, §39.051 and §39.052, the academic performance standards under TEC, §39.054, or any financial accountability standard as determined by the commissioner, the commissioner may lower the district's accreditation status, academic accountability rating, or financial accountability rating, as applicable, and take appropriate action under this subchapter.

(c) Regardless of whether the commissioner lowers a district's status or rating under subsection (b) of this section, the commissioner may take action under TEC, Chapters 39 and 39A, or this section if the commissioner determines that the action is necessary to improve any area of performance by the district or campus.

(d) Regardless of whether a district has satisfied the accreditation criteria, if for two consecutive school years, including the current school year, a district has had a conservator or management team assigned, the commissioner may appoint a board of managers, a majority of whom must be residents of the district, to exercise the powers and duties of the board of trustees. For purposes of this subsection, a school year begins on the first day of instruction and includes any portion of the school year.

(e) Subject to subsections (h)-(k) of this section, once the commissioner takes action under this subchapter, the commissioner may impose on the district or campus any other sanction under TEC, Chapter 39 or 39A, or this subchapter, singly or in combination, to the extent the commissioner determines is reasonably required to achieve the purposes specified in §97.1053 of this title.

(f) In determining whether to impose a particular sanction under TEC, Chapters 39 and 39A, or this subchapter, the commissioner may consider the costs and logistical concerns of the district [5] but shall give primary consideration to the best interest of the district's students. The sanction selected shall be reasonably calculated to address the district's or campus' deficiencies immediately or within a reasonable time, in the best interest of its present and future students. The following shall be considered as being contrary to the best interests of the district's students:

(1) inefficient or ineffectual use of district funds or property;

(2) failure to adequately account for funds;

(3) receipt of a substantial over-allocation of funds for which the district has failed to plan prudently in light of its obligation to repay the funds under TEC, §42.258; and

(4) inability to implement effective change to improve the performance of students in the district or at the campus.

(g) In determining whether to impose a particular sanction under TEC, Chapters 39 and 39A, or this subchapter based on resource allocation practices as authorized by TEC, §39.003(a)(12) and (d) and §39.0821 [and §39.057(a)(12), (d), and (e)], the commissioner shall consider the factors specified in §97.1053 of this title.

(h) The commissioner shall notify the school district or open-enrollment charter school in writing of a sanction imposed under this subchapter or §100.1023 of this title (relating to Intervention Based on Charter Violations). The notice must state the basis for finding that the district or open-enrollment charter school does not satisfy the applicable criteria as indicated in this subchapter or §100.1023 of this title. The finding(s) may be made in the notice or in a final investigative report or based on a final investigative report.

(i) If a finding is made for the first time in the notice required by subsection (h) of this section, the Texas Education Agency shall comply with Chapter 157, Subchapter EE, Division 1, of this title (relating to Informal Review) with respect to the new finding.

(j) A determination under this section must be made in writing and may be included in a written notice under subsection (h) of this section. The determination may be made in the notice or in a final investigative report or based on a final investigative report. A determination under this section may be based on a report on the progress of a prior action under this subchapter.

(k) The commissioner shall annually review a sanction imposed under subsection (h) of this section and shall increase the sanction, as required by TEC, §39A.901. The commissioner shall quarterly review the need for a conservator or a management team imposed under this subchapter, as required by TEC, §39A.003. If reviews are required

under both TEC, §39A.901 and §39A.003, a quarterly review under TEC, §39A.003, may satisfy the annual review under TEC, §39A.901. An annual or quarterly review is not subject to the requirements of this section.

§97.1059. *Standards for All Accreditation Sanction Determinations.*

(a) The commissioner of education shall impose district and campus accreditation sanctions under this subchapter individually or in combination as the commissioner determines necessary to achieve the purposes identified in §97.1053 of this title (relating to Purpose).

(b) In making a determination under subsection (a) of this section, the commissioner shall consider the seriousness, number, extent, and duration of deficiencies identified by the Texas Education Agency (TEA) and shall impose one or more accreditation sanctions on a district and its campuses as needed to address:

(1) each material deficiency identified by the TEA through its systems for district and campus accountability, including:

(A) an accreditation status under §97.1055 of this title (relating to Accreditation Status);

(B) an academic accountability rating under §97.1001 of this title (relating to Accountability Rating System);

(C) a financial accountability rating under §109.1001 of this title (relating to Financial Accountability Ratings) or a financial audit or investigation;

(D) program effectiveness under §97.1071 of this title (relating to Special Program Performance; Monitoring, Review, and Supports [Intervention Stages]) or other law;

(E) the results of a special [~~accreditation~~] investigation under Texas Education Code, §~~39.003~~ [~~§39-057~~] ;

(F) the results of an investigative report under Chapter 157, Subchapter EE, of this title (relating to Informal Review, Formal Review, and Review by State Office of Administrative Hearings); complaint investigation; special education due process hearing; or data integrity investigation, including an investigation of assessment or financial data;

(G) an inability to implement effective change to improve the performance of students in the district or at the campus; or

(H) other information related to subparagraphs (A)-(G) of this paragraph.

(2) any ongoing failures to address deficiencies previously identified or patterns of recurring deficiencies;

(3) any lack of district responsiveness to, or compliance with, current or prior interventions or sanctions; and

(4) any substantial or imminent harm presented by the deficiencies of the district or campus to the welfare of its students or to the public interest.

(c) If the commissioner identifies a district and one or more of its campuses for accreditation sanction under subsection (a) of this section, the commissioner may elect to combine activities to be undertaken at the district and campus levels as needed to achieve the purposes of each sanction.

(d) When making any campus-level determination under this subchapter, the commissioner shall also consider the district-level performance of the district on applicable academic, fiscal, and compliance standards.

(e) The commissioner must review at least annually the performance of a district for which the accreditation status or academic

accountability rating has been lowered due to insufficient student performance and may not raise the accreditation status or rating until the district has demonstrated improved student performance. If the review reveals a lack of improvement, the commissioner shall increase the level of state intervention and sanction unless the commissioner finds good cause for maintaining the current status.

§97.1072. *Residential Facility Monitoring; Determinations, Investigations, and Sanctions.*

(a) Students with disabilities residing in residential facilities (RFs) are a unique and vulnerable population that often has limited access to family members who can advocate for their educational needs. Accordingly, the commissioner of education hereby establishes the Residential Facility Monitoring (RFM) system, through which the Texas Education Agency (TEA) will meet its federal and state special education monitoring obligations under 34 Code of Federal Regulations §300.149 and §300.600 and Texas Education Code (TEC), §29.010, for this population. The definition of an RF for purposes of the RFM system will be included in the Residential Facility Monitoring (RFM) Manual provided in subsection (f) of this section. Districts serving students with disabilities residing in RFs located within the districts' geographic boundaries and/or jurisdictions will be subject to the RFM system. These districts are referred to as RF districts.

(b) RF districts shall report data, as directed by the TEA, in a data collection system accessible through the TEA secure website.

(c) The commissioner shall determine which RF districts will be subject to RFM activities based on a review of available information according to the following general criteria or other factors set forth in the Residential Facility Monitoring (RFM) Manual:

(1) the degree to which the district's data reflect a need for monitoring and intervention, as indicated by the number of RF students with disabilities enrolled in the district; the presence of new RFs within the district; and the district's performance on certain critical indicators related to compliance with special education program requirements;

(2) a comparison of the district's performance to aggregated state performance and to the performance of other districts;

(3) a review of the district's longitudinal performance;

(4) the availability of state and regional resources to intervene in all districts exhibiting a comparable need for intervention; and

(5) the length of time since the district was last subject to RFM activities.

(d) In addition to the criteria under subsection (c) of this section, the commissioner may use random district selection as a method of system validation and/or may consider any other applicable information such as:

(1) complaints investigation results;

(2) special education due process hearing decisions;

(3) data validation activities;

(4) monitoring results under §97.1071 of this title (relating to Special Program Performance; Monitoring, Review, and Supports [Intervention Stages]);

(5) the degree to which the district has achieved timely correction of previously identified noncompliance with program requirements;

(6) longitudinal intervention history; and

(7) other relevant factors.

(e) The commissioner may use graduated monitoring and intervention activities to implement the RFM system. In addition to any investigation, intervention, or sanction authorized by TEC, Chapter 39, or §89.1076 of this title (relating to Interventions and Sanctions), such intervention may require an RF district to implement and/or participate in:

- (1) focused analysis of district data;
- (2) reviews of district program effectiveness;
- (3) public meetings;
- (4) focused compliance reviews conducted by review teams established by the TEA;
- (5) on-site reviews; and/or
- (6) corrective action planning.

(f) The specific criteria, standards, and procedures for implementing the RFM system are described in the Residential Facility Monitoring (RFM) Manual, dated August 2011, provided in this subsection. The specific criteria, standards, and procedures used in the RFM manual adopted for use prior to 2011 remain in effect for all purposes with respect to the applicable period of adoption.
Figure: 19 TAC §97.1072(f) (No change.)

(g) RFM activities under this section are intended to assist the RF district in achieving compliance with federal and state special education requirements and do not preclude or substitute for a sanction under another provision of this subchapter.

(1) The TEA will implement sanctions authorized under TEC, Chapter 39, or this subchapter as necessary to promote timely and complete correction of identified noncompliance.

(2) A decision to impose sanctions shall be based on the accreditation and compliance performance of the district, as determined under §89.1076 of this title, §97.1057 of this title (relating to Interventions and Sanctions; Lowered Rating or Accreditation Status), and this subchapter.

(h) RFM actions taken under this section do not preclude or substitute for other responses to or consequences of program ineffectiveness or noncompliance identified by the TEA such as:

- (1) assignment of required professional services, paid for by the district;
- (2) required submission of an improvement and/or corrective action plan, including the provision of compensatory services as appropriate, paid for by the district;
- (3) expanded oversight, including, but not limited to, frequent follow-up contacts with the district, submission of documentation verifying implementation of intervention activities and/or a corrective action plan, and submission of district/program data;
- (4) public release of RFM review findings;
- (5) issuance of a public notice of deficiencies and planned corrective actions to the district's board of trustees;
- (6) denial of requests under TEC, §7.056 and/or §12.114;
- (7) appointment of a monitor, conservator, management team, or board of managers under TEC, Chapter 39, and/or §97.1073 of this title (relating to Appointment of Monitor, Conservator, or Board of Managers);
- (8) reduction, suspension, redirection, or withholding of program funds;

(9) lowering of the district's special education monitoring status; and/or

(10) lowering of the district's accreditation status.

(i) As a system safeguard, the TEA will conduct desk review or on-site verification activities through random or other means of selection to verify system effectiveness and/or district implementation of RFM requirements, including, but not limited to, accuracy of data reported through the data collection system accessible through the TEA secure website and other data reporting, timely and sufficient implementation of monitoring and intervention activities, implementation of corrective action plans, and continued district compliance after completion of a corrective action plan.

§97.1073. *Appointment of Monitor, Conservator, or Board of Managers.*

(a) The commissioner of education shall appoint a monitor, conservator, management team, or board of managers whenever such action is required, as determined by this section. Action under any other section of this subchapter is not a prerequisite to acting under this section.

(b) The commissioner may appoint a monitor under Texas Education Code (TEC), §39A.002, when:

(1) the district has an accreditation rating of Accredited-Warned or Accredited-Probation;

(2) a monitor is needed to ensure district-level support to low-performing campuses and the implementation of the updated targeted improvement plan; or

(3) all of the following exist:

(A) the deficiencies identified under §97.1059 of this title (relating to Standards for All Accreditation Sanction Determinations) require a monitor to participate in and report to the commissioner on the activities of the district's board of trustees and superintendent;

(B) the deficiencies identified under §97.1059 of this title are not of such severity or duration as to require direct Texas Education Agency (TEA) oversight of district operations;

(C) the district has been responsive to and generally compliant with previous commissioner sanctions and TEA interventions; and

(D) stronger intervention is not required to prevent substantial or imminent harm to the welfare of the district's students or to the public interest.

(c) The commissioner may appoint a conservator or management team under TEC, §§39A.002, 39A.003, 39A.006, and 39A.102, when:

(1) the district has an accreditation rating of Accredited-Probation;

(2) a conservator or management team is needed to ensure and oversee district-level support to low-performing campuses and the implementation of the updated targeted improvement plan;

(3) the nature or duration of the deficiencies require that the TEA directly oversee the operations of the district in the area(s) of deficiency;

(4) the district has not been responsive to or compliant with TEA intervention requirements; or

(5) such intervention is needed to prevent substantial or imminent harm to the welfare of the district's students or to the public interest.

(d) The decision whether to appoint a conservator or management team under subsection (c) of this section may be based on logistical concerns, including the competencies required and the volume of work involved. The addition of a conservator to form a management team or the addition of additional members to the management team is not a new sanction and does not entitle the district to an additional review.

(e) The commissioner may appoint a board of managers under TEC, §§39A.004, 39A.006, 39A.102, 39A.107, 39A.111, 39A.256, or 12.116(d)(1), as applicable, when:

(1) sanctions under subsection (b) or (c) of this section have been ineffective to achieve the purposes identified in §97.1057 of this title (relating to Interventions and Sanctions; Lowered Rating or Accreditation Status);

(2) the commissioner has initiated proceedings to close or annex the district;

(3) the commissioner has initiated proceedings to close a campus, and such intervention is needed to cease operations of the campus;

(4) such intervention is needed to prevent substantial or imminent harm to the welfare of the district's students or to the public interest;

(5) a board of managers is needed to ensure and oversee district-level support to low-performing campuses and the implementation of the updated targeted improvement plan;

(6) the district has a campus that is subject to TEC, §39A.111, and the commissioner does not order the closure of the campus;

(7) deficiencies identified in a special [accreditation] investigation warrant the appointment of a board of managers; or

(8) a failure in governance results in an inability to carry out the powers and duties of the board of trustees as outlined in TEC, §11.151 and §11.1511.

(f) Not later than the second anniversary date of the appointment of the board of managers, the commissioner shall notify the board of managers and the board of trustees of the date on which the appointment of the board of managers will expire.

(g) A board of managers shall, during the period of the appointment, order the election of members of the board of trustees of the district in accordance with applicable provisions of law. Except as provided by this subsection, the members of the board of trustees do not assume any powers or duties after the election until the appointment of the board of managers expires.

(1) An individual elected to the board of trustees at an election ordered under this subsection assumes and may exercise all powers and duties of that office at the first official board meeting where the replacement of the member of the board of managers with the elected board of trustees member occurs and after satisfying all legal and procedural prerequisites to take office.

(2) Any member of the board of trustees elected during the appointment of the board of managers who has not yet assumed the powers and duties of a member of the board of trustees will not be considered for purposes of constitution of a quorum.

(3) A board of managers shall order elections for trustees with three-year terms to be held annually in accordance with TEC, §11.059(b). Following each of the last three years of the period of appointment, one-third of the members of the board of managers shall

be replaced by the number of members of the school district board of trustees who were elected at an election ordered under this paragraph that constitutes, as closely as possible, one-third of the membership of the board of trustees.

(4) A board of managers shall order elections for trustees with four-year terms to be held biennially in accordance with TEC, §11.059(c). Following each of the last three years of the period of appointment, one-third of the members of the board of managers shall be replaced by the number of members of the school district board of trustees who were elected at an election ordered under this paragraph that constitutes, as closely as possible, one-third of the membership of the board of trustees.

(5) Upon the appointment of a board of managers to a school district, the commissioner will designate the sequence in which the board of managers' member groups and eligible board of trustees' member groups, the number of which constitutes, as closely as possible, one-third of the membership of the board of trustees, will be replaced by an equal number of elected board of trustees members. The commissioner may modify the composition or number of members constituting those groups at any time during the period of the appointment.

(6) The commissioner may at any time remove and/or replace a member of the board of managers and may expand or reduce the number of the board of manager members at any time during the appointment of the board of managers.

(7) On the expiration of the appointment of the board of managers, the board of trustees assumes all of the powers and duties assigned to a board of trustees of the school district.

(8) The commissioner may designate the sequence in which an eligible trustee of the board of trustees will replace a member of the board of managers. If the commissioner makes such designation, a trustee replacing a manager would complete the remainder of his or her elected term upon placement to the transitioning board. In the absence of a designation by the commissioner, the trustees elected in an election following each of the last three years of the board of managers' appointment, as determined by the commissioner, shall replace the designated members of the board of managers, except as follows.

(A) In the event that the number of trustees elected in the first election exceeds one-third of the total board of trustees membership, the board of managers shall determine by lot which of those trustees shall be selected to initially replace members of the board of managers and assume positions on the board.

(B) Any remaining trustees elected at the first election ordered under this paragraph shall replace an equivalent number of members of the board of managers and assume positions on the board in the following year, together with any trustees elected in the second election ordered by the board of managers under this paragraph.

(C) In the event that the total number of previously elected trustees who have not yet assumed positions on the board exceeds one-third of the total board of trustees membership, the trustees elected at the first election ordered under this paragraph shall receive priority in the order of placement on the board, followed by trustees elected at the second election, who shall be selected by lot by the board of managers.

(D) Any trustees elected in the third election ordered by the board of managers under this paragraph shall replace an equivalent number of members of the board of managers and assume positions on the board following the last year of the period of the board of managers' appointment.

(h) The training in effective leadership strategies required under TEC, §39A.205, shall be provided by TEA-approved authorized providers of school board training to each individual appointed by the commissioner to a board of managers, including board of trustees members appointed under subsection (g)(4) of this section, and, following the expiration of the appointment of the board of managers, to the board of trustees of the school district.

(i) A board of trustees member appointed under subsection (g)(4) of this section must complete the training required in subsection (h) of this section prior to or within 10 days of the appointment. Failure to do so may result in the removal of the board of trustees member from the board of managers.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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CHAPTER 102. EDUCATIONAL PROGRAMS

SUBCHAPTER MM. COMMISSIONER'S RULES CONCERNING SUPPLEMENTAL SPECIAL EDUCATION SERVICES PROGRAM

19 TAC §102.1601

The Texas Education Agency (TEA) proposes new §102.1601, concerning educational programs. The proposed new section would implement the Supplemental Special Education Services (SSES) program added by Senate Bill (SB) 1716, 87th Texas Legislature, Regular Session, 2021.

BACKGROUND INFORMATION AND JUSTIFICATION: SB 1716, 87th Texas Legislature, Regular Session, 2021, added Texas Education Code (TEC), Chapter 29, Subchapter A-1, to establish the SSES program. The program is designed to address concerns that have arisen as a result of the coronavirus pandemic for students receiving special education services. It provides additional funds for eligible students who are served in special education to use for supplemental services and materials. These supplemental services and materials are not and cannot be considered as part of the provision of a free appropriate public education as set out in a student's individualized education program. The SSES program expires September 1, 2024.

Under SB 1716, the commissioner is required to establish rules to implement and administer the SSES program. Proposed new §102.1601 would establish the parameters to allow eligible students to be provided with funds that may be used for goods and services with TEA-approved providers and vendors. In accordance with statute, certain eligible students will be given priority based on enrollment in a school district or open-enrollment charter school that is eligible for a compensatory education allotment.

In addition, TEA may prioritize applicants with economic need based on qualification for the National School Lunch Program.

FISCAL IMPACT: Jennifer Alexander, deputy commissioner for special populations, has determined that for the first five-year period the proposal is in effect there are no additional costs to state or local government, including school districts and open-enrollment charter schools, required to comply with the proposal.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis, specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create a new regulation to implement the SSES program created by SB 1716, 87th Texas Legislature, Regular Session, 2021.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit, or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: Ms. Alexander has determined that for each year of the first five years the proposal is in effect, the public benefit anticipated as a result of enforcing the proposal would be implementing the SSES program created by SB 1716, 87th Texas Legislature, Regular Session, 2021. The SSES program provides a benefit of additional services and instructional materials to eligible students and prioritizes students with financial need. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins October 8, 2021, and ends November 8, 2021. Public hearings to solicit testimony and input on the proposal will be held at 9:00 a.m. on October 19 and 21, 2021, via Zoom. The public may participate in either hearing virtually by linking to the hearings at <https://us02web.zoom.us/j/87809241946>. The

public may attend one or both hearings. Anyone wishing to testify at one of the hearings must sign in between 8:30 a.m. and 9:00 a.m. on the day of the respective hearing. Each hearing will conclude once all who have signed in have been given the opportunity to comment. Each individual's comments are limited to three minutes, and each individual may comment only once. Both hearings will be recorded and made available publicly. Parties who are interested in providing written comments in addition to, or in lieu of, public testimony are encouraged to send written comments to spedrule@tea.texas.gov. Questions about the hearings should be directed to SpecialEducation@tea.texas.gov. Additionally, persons requiring special accommodations, including the use of an interpreter, should notify the agency by emailing SpecialEducation@tea.texas.gov at least five working days before the respective hearing. A form for submitting public comments is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_\(TAC\)/Proposed_Commissioner_of_Education_Rules/](https://tea.texas.gov/About_TEA/Laws_and_Rules/Commissioner_Rules_(TAC)/Proposed_Commissioner_of_Education_Rules/).

STATUTORY AUTHORITY. The new section is proposed under Texas Education Code (TEC), §29.041, as added by Senate Bill (SB) 1716, 87th Texas Legislature, Regular Session, 2021, which establishes requirements for providing a supplemental special education services and instructional materials program for certain public school students receiving special education services and requires the commissioner by rule to determine, in accordance with TEC, Chapter 29, Subchapter A-1, the criteria for providing a program to provide supplemental special education services and instructional materials for eligible public school students; TEC, §29.042, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to determine requirements related to the establishment and administration of the SSES program; TEC, §29.043, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to establish an application process for the SSES program; TEC, §29.044, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to determine eligibility criteria for the approval of an application submitted under TEC, §29.043; TEC, §29.045, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to determine requirements for students meeting eligibility criteria and requirements for assigning and maintaining accounts under TEC, §29.042(b); TEC, §29.046, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to determine requirements and restrictions related to account use for accounts assigned to students under TEC, §29.045; TEC, §29.047, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to determine requirements related to criteria and application for agency-approved providers and vendors; TEC, §29.048, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires the commissioner to determine responsibilities for the admission, review, and dismissal committee; and TEC, §29.049, as added by SB 1716, 87th Texas Legislature, Regular Session, 2021, which requires that the commissioner adopt rules as necessary to establish and administer the SSES and instructional materials program.

CROSS REFERENCE TO STATUTE. The new section implements Texas Education Code, §§29.041-29.049.

§102.1601. Supplemental Special Education Services and Instructional Materials Program for Certain Public School Students Receiving Special Education Services.

(a) Definitions. For the purposes of this section, the following definitions apply.

(1) Eligible student--A student who meets all program eligibility criteria under Texas Education Code (TEC), §29.044, and this section.

(2) Management system--The online system provided by the marketplace vendor to allow for account creation, management of funds, and access to the marketplace.

(3) Marketplace--The virtual platform where parents and guardians with Supplemental Special Education Services (SSES) program funds may purchase goods and services.

(4) Marketplace vendor--The vendor chosen by the Texas Education Agency (TEA) to create an online marketplace for the use of SSES program funds.

(5) Supplemental special education instructional materials--This term has the meaning defined in TEC, §29.041, and specifically excludes materials that are provided as compensatory services or as a means of providing a student with a free appropriate public education.

(6) Supplemental special education services--This term has the meaning defined in TEC, §29.041, and specifically excludes services that are provided as compensatory services or as a means of providing a student with a free appropriate public education.

(b) Eligibility criteria. All students currently enrolled in a Texas public school district or open-enrollment charter school who are served in a special education program during the 2021-2022 or 2022-2023 school year, including, but not limited to, students in early childhood special education, prekindergarten, Kindergarten-Grade 12, and 18-and-over transition programs, are eligible for the SSES program with the following exclusions:

(1) students who do not reside in Texas or move out of the state, not including military-connected students entitled to enroll or remain enrolled while outside the state; or

(2) students who previously received a federally funded SSES grant.

(c) Awards. Parents and guardians of eligible students may receive grants as long as funds are available of up to \$1,500 for use in the purchasing of supplemental special education materials and supplemental special education services through the curated marketplace of educational goods and services. Parents and guardians may receive only one grant for each eligible student. Students enrolled in a school district or open-enrollment charter school that is eligible for a compensatory education allotment under TEC, §48.104, will be prioritized to receive a grant award. TEA will prioritize, as necessary, the awarding of applicant accounts based on applicants qualifying for the National School Lunch Program and available funds.

(d) Establishment of the marketplace.

(1) In accordance with TEC, §29.042(d), TEA shall award an education service center with an operational and school district support grant, which may include, but is not limited to, the following operational requirements:

(A) writing and administering a contract for a vendor for the SSES marketplace that curates the content in its marketplace for educational relevancy;

(B) providing technical assistance to parents and guardians throughout the SSES program process;

(C) serving as the main point of contact for the selected marketplace vendor to ensure eligible student accounts are appropriately spent down;

(D) approving or denying all purchases from the SSES marketplace, including communication with parents and guardians about purchase order requests;

(E) increasing the number of qualified service providers in the marketplace; and

(F) approving or denying all potential service providers.

(2) Materials and service providers may apply to be listed in the marketplace. To become an approved marketplace service provider, an applicant must sign a service provider agreement and comply with licensing, safety, and employee background checks.

(A) Organization service providers are required to provide their Texas Tax ID for TEA to verify the validity of the organization.

(B) Individual service providers are required to provide proof of credentials and licensing in accordance with the individual service provider categories established by TEA.

(3) TEA shall provide a process for the application and approval of vendors to the marketplace.

(4) TEA and the marketplace vendor shall provide a curated list of vendors through which parents and guardians can purchase educationally relevant materials. The established marketplace vendor shall be responsible for ensuring the vendors comply with SSES program parameters as they relate to the marketplace and be responsible for all communications with marketplace vendors.

(e) Application process for grant on behalf of a student.

(1) TEA is responsible for the application process and the determination of which applicants are approved for SSES program grants.

(2) Parents and guardians who would like to apply on behalf of their eligible students must complete the online application.

(3) Upon approval of the application:

(A) TEA shall send contact information for parents and guardians of eligible students in a secure manner to the online marketplace vendor for account creation and distribution;

(B) parents and guardians of eligible students will receive an email to the same email address provided during application from the marketplace vendor with information on how to access their accounts; and

(C) parents and guardians will be awarded an account of not more than \$1,500 per eligible student to be used to purchase supplemental special education services and supplemental special education materials.

(4) Parents and guardians of students who are deemed not eligible or who are determined to have violated account use restrictions under subsection (h) of this section will receive notification from TEA and be provided an opportunity to appeal the denial or account use determination. TEA shall exercise its discretion to determine the validity of any such appeal.

(5) If necessary, eligible students will be placed on a waitlist and parents and guardians will be notified. Should additional funds

become available, priority will be given in the order established by the waitlist and in accordance with subsection (c) of this section.

(6) TEA shall maintain confidentiality of students' personally identifiable information in accordance with the Family Educational Rights and Privacy Act and, to the extent applicable, the Health Insurance Portability and Accountability Act.

(f) Approval of application; assignment of account.

(1) TEA shall set aside funds for a pre-determined number of accounts of up to \$1,500 per account to be awarded to parents and guardians of eligible students.

(2) Parents and guardians with more than one eligible student may apply and receive a grant for each eligible student.

(3) Approved parents and guardians will receive an award notification email from the marketplace vendor and may begin spending account funds upon completion of account setup.

(4) Within 30 calendar days from receiving an award notification email, parents and guardians must:

(A) access or log in to their account or the account may be subject to reclamation; and

(B) agree to and sign the SSES parental acknowledgement affidavit.

(g) Use of funds. Use of SSES program funds provided to parents and guardians are limited as follows.

(1) Only supplemental special education materials and supplemental special education services available through the marketplace of approved providers and vendors may be purchased with SSES program funds.

(2) Supplemental special education materials and services must directly benefit the eligible student's educational needs.

(3) Supplemental special education materials shall be used in compliance with TEA purchasing guidelines.

(4) If TEA approves vendors for a category of instructional material under subsection (d) of this section, instructional materials must be purchased from the TEA-approved vendor for that category of instructional material. If TEA does not establish criteria for a category of instructional materials, funds in a student's account may be used to purchase the instructional materials from any vendor.

(5) TEA has full authority to reject or deny any purchase.

(6) Parents may not use SSES program funds for reimbursement of goods or services obtained outside of the marketplace. SSES program funds shall not be paid directly to parents or guardians of eligible students.

(h) Account use restrictions. TEA may, subject to the appeal process referenced in subsection (e)(4) of this section, close or suspend accounts and reclaim a portion or all of the funds from accounts in the marketplace if:

(1) the materials or services that parents or guardians attempt to purchase are not educational in nature or are deemed to be in violation of the purchasing guidelines set forth by TEA;

(2) it is determined that the materials or services purchased do not meet the definitions in subsection (a)(5) and (6) of this section;

(3) the SSES program parental acknowledgement affidavit is not signed within 30 calendar days of receipt of account email from the marketplace vendor;

(4) account holders do not begin spending funds from their accounts within six months after account creation; or

(5) a student no longer meets the eligibility criteria set out in subsection (b) of this section.

(i) Requirements to provide information.

(1) School districts and open-enrollment charter schools shall notify parents and guardians of students served by special education of the SSES program and how to apply.

(2) At the student's next admission, review, and dismissal (ARD) committee meeting, the ARD committee shall determine if a student has been awarded an SSES account. At this meeting, upon learning that a student has been awarded an account, the ARD committee shall provide:

(A) information about types of goods and services that are available to the eligible student; and

(B) instructions and resources on accessing the online accounts.

(j) Restrictions. A student's ARD committee may not consider a student's current or anticipated eligibility for any supplemental special education services or materials that may be provided under this section when developing or revising a student's individualized education program, when determining a student's educational setting, or in the provision of a free appropriate public education.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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CHAPTER 112. TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR SCIENCE

The State Board of Education (SBOE) proposes new §§112.1-112.7 and 112.25-112.28, concerning Texas Essential Knowledge and Skills (TEKS) for science. The proposed new sections would update the standards to better align the content and ensure the standards remain current.

BACKGROUND INFORMATION AND JUSTIFICATION: In accordance with statutory requirements that the SBOE by rule identify the essential knowledge and skills of each subject in the required curriculum, the SBOE follows a board-approved cycle to review and revise the essential knowledge and skills for each subject.

At the September 2019 meeting, SBOE members were asked to designate content advisors for the review and revision of the science TEKS. In December 2019, applications to serve on science TEKS review work groups were posted on the Texas Education Agency (TEA) website. Additionally in December 2019, TEA distributed a survey to collect information from educators regarding

the review and revision of the science TEKS. TEA staff provided applications for the science review work groups to SBOE members on a monthly basis from December 2019 to June 2020 and in September, October, and December 2020. At the January 2020 SBOE meeting, the SBOE provided specific guidance for the TEKS review work groups.

Also in January 2020, science TEKS review content advisors met in a face-to-face meeting to develop consensus recommendations regarding revisions to the science TEKS to share with future work groups. At that time, the content advisors met with representatives from Work Group A to discuss the consensus recommendations. Work Group A convened in February 2020 to review survey results, content advisor consensus recommendations, and the SBOE's guidance to work groups to develop recommendations for how science TEKS review work groups could address these areas. Work Group B was convened virtually in June 2020 to develop recommendations for four high school science courses: Biology, Chemistry, Integrated Physics and Chemistry, and Physics. In November 2020, the SBOE approved for second reading and final adoption proposed new 19 TAC §§112.41-112.45 for implementation beginning in the 2023-2024 school year.

Work Group D was convened for monthly meetings from November 2020-February 2021 to develop recommendations for TEKS for five additional high school science courses: Aquatic Science, Astronomy, Earth and Space Science, Environmental Systems, and a new course Specialized Topics in Science. In June 2021, the board gave final approval to the additional high school science course for implementation beginning in the 2024-2025 school year.

Between August and November 2020, Work Group C convened for a series of virtual meetings to develop recommendations for the Grades 6-8 science TEKS. Work Group E was convened for monthly meetings between January and March 2021 to develop recommendations for the science TEKS for Kindergarten-Grade 5. Work Groups C and E were reconvened in May and June 2021 to address public feedback and revise their draft recommendations. Work Group F was convened for a series of virtual meetings in July 2021 to address SBOE feedback provided at the April and June 2021 SBOE meetings, vertically align the elementary and middle school standards, meet with content advisors, and finalize the draft recommendations for the Kindergarten-Grade 8 TEKS for science.

Proposed new §§112.1-112.7 and 112.25-112.28 would introduce new science standards for Kindergarten-Grade 8 to be implemented in the 2024-2025 school year.

The SBOE approved the proposed new sections for first reading and filing authorization at its September 3, 2021 meeting.

FISCAL IMPACT: Monica Martinez, associate commissioner for standards and support services, has determined that for the first five-year period the proposal is in effect (2022-2026), there are no fiscal implications to the state. However, in fiscal years 2019 and 2020, there was a fiscal impact to TEA to reimburse committee members for travel to review the science TEKS. For fiscal year 2020, the estimated cost to TEA was \$23,609. There will also be implications for TEA if the state develops professional development to help teachers and administrators understand the revised TEKS. Any professional development that is created would be based on whether TEA received an appropriation for professional development in the next biennium. There may be fiscal implications for school districts and charter schools

to implement the proposed revisions to the TEKS, which may include the need for professional development and revisions to district-developed databases, curriculum, and scope and sequence documents. Since curriculum and instruction decisions are made at the local district level, it is difficult to estimate the fiscal impact on any given district.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic impact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create new regulations by proposing revised science TEKS required to be offered by school districts and charter schools.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit, or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: Ms. Martinez has determined that for each year of the first five years the proposal is in effect, the public benefit anticipated as a result of enforcing the proposal would be better alignment of the TEKS and coordination of the standards with the adoption of instructional materials. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins October 8, 2021, and ends at 5:00 p.m. on November 12, 2021. A form for submitting public comments is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_\(TAC\)/Proposed_State_Board_of_Education_Rules/](https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_(TAC)/Proposed_State_Board_of_Education_Rules/). The SBOE will take registered oral and written comments on the proposal at the appropriate committee meeting in November 2021 in accordance with the SBOE board operating policies and procedures. A request for a public hearing on the proposal submitted under

the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the *Texas Register* on October 8, 2021.

SUBCHAPTER A. ELEMENTARY

19 TAC §§112.1 - 112.7

STATUTORY AUTHORITY. The new sections are proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; and TEC, §28.002(j), which allows the SBOE to require laboratory instruction in secondary science courses and require a specific amount or percentage of time in a secondary science course that must be laboratory instruction.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §7.102(c)(4) and §28.002(a), (c), and (j).

§112.1. Implementation of Texas Essential Knowledge and Skills for Science, Elementary, Adopted 2021.

(a) The provisions of §§112.2-112.7 of this subchapter shall be implemented by school districts.

(b) No later than July 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for science as adopted in §§112.2-112.7 of this subchapter.

(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§112.2-112.7 of this subchapter shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.

(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than July 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§112.2-112.7 of this subchapter shall be implemented for the following school year.

(e) Sections 112.11-112.16 of this subchapter shall be superseded by the implementation of §§112.2-112.7 of this subchapter.

§112.2. Science, Kindergarten, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation in science. In Kindergarten, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investi-

gation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 80% of instructional time.

(B) Matter and its properties. Students build their knowledge of the natural world using their senses. The students focus on observable properties and patterns of objects, including shape, color, texture, and material.

(C) Force, motion, and energy. Students explore the location, motion, and position of objects and investigate the importance of light energy as it relates to the students' everyday lives. Students focus on demonstrating light energy sources and their effect on objects.

(D) Earth and space. Patterns are recognizable in the natural world and among objects in the sky. Students understand that weather, seasons of the year, and day and night are repeated patterns. Materials found on Earth can be used and classified.

(E) Organisms and environments. All living organisms satisfy basic needs through interactions with nonliving things and living organisms, and they have structures and functions that help them survive within their environments. Students investigate the life cycle of plants and identify likenesses between parents and young.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should

be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;

(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including hand lenses, goggles, trays, cups, bowls, sieves or sifters, notebooks, terrariums, aquariums, samples (rocks, sand, soil, loam, gravel, clay, seeds, and plants), windsock, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, blocks or cubes, tuning fork, various flashlights, small paper cups, items that roll, noise makers, hot plate, opaque objects, transparent objects, foil pie pans, foil muffin cups, wax paper, technology, Sun-Moon-Earth model, and plant life cycle model to observe, measure, test, and compare;

(E) collect observations and measurements as evidence;

(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify basic advantages and limitations of models such as their size, properties, and materials;

(B) analyze data by identifying significant features and patterns;

(C) use mathematical concepts to compare two objects with common attributes; and

(D) evaluate a design or object using criteria to determine if it works as intended.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) explain how science or an innovation can help others; and

(B) identify what scientists and engineers are and explore what different scientists and engineers do.

(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:

(A) identify and use patterns to describe phenomena or design solutions;

(B) investigate and predict cause-and-effect relationships in science;

(C) describe the properties of objects in terms of relative size (scale) and relative quantity;

(D) examine the parts of a whole to define or model a system;

(E) identify forms of energy and properties of matter;

(F) describe the relationship between the structure and function of objects, organisms, and systems; and

(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.

(6) Matter and its properties. The student knows that objects have physical properties that determine how they are described and classified. The student is expected to identify and record observable physical properties of objects, including shape, color, texture, and material, and generate ways to classify objects.

(7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to describe and predict how a magnet interacts with various materials and how magnets can be used to push or pull.

(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:

(A) communicate the idea that objects can only be seen when a light source is present and compare the effects of different amounts of light on the appearance of objects; and

(B) demonstrate and explain that light travels through some objects and is blocked by other objects, creating shadows.

(9) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

(A) identify, describe, and predict the patterns of day and night and their observable characteristics; and

(B) observe, describe, and illustrate the Sun, Moon, stars, and objects in the sky such as clouds.

(10) Earth and space. The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to:

(A) describe and classify rocks by the observable properties of size, shape, color, and texture;

(B) observe and describe weather changes from day to day and over seasons; and

(C) identify evidence that supports the idea that air is all around us and demonstrate that wind is moving air using items such as a windsock, pinwheel, or ribbon.

(11) Earth and space. The student knows that earth materials are important to everyday life. The student is expected to observe and generate examples of practical uses for rocks, soil, and water.

(12) Organisms and environments. The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to:

(A) observe and identify the dependence of plants on air, sunlight, water, nutrients in the soil, and space to grow; and

(B) observe and identify the dependence of animals on air, water, food, space, and shelter.

(13) Organisms and environments. The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:

(A) identify the structures of plants, including roots, stems, leaves, flowers, and fruits;

(B) identify the different structures that animals have that allow them to interact with their environment such as seeing, hearing, moving, and grasping objects;

(C) identify and record the changes from seed, seedling, plant, flower, and fruit in a simple plant life cycle; and

(D) identify ways that young plants resemble the parent plant.

§112.3. Science, Grade 1, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation in science. In Grade 1, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 80% of instructional time.

(B) Matter and its properties. Students build their knowledge of the natural world using their senses. Students focus on observable properties and patterns of objects, including larger and smaller, heavier and lighter, shape, color, and texture. The students understand changes in materials caused by heating and cooling.

(C) Force, motion, and energy. Students know that force and motion are related and that energy exists in many forms as a part of everyday life. Magnetism interacts with various materials and can be used as a push and pull. The students investigate the importance of heat and focus on changes caused by heating and cooling.

(D) Earth and space. Patterns, cycles, and systems are recognizable in the natural world and among objects in the sky. Students make informed choices by understanding weather and seasonal patterns. Students understand that natural resources on Earth, including rocks, soil, and water, are used by humans and can be conserved.

(E) Organisms and environments. All living organisms interact with living and nonliving things within their environments and use structures to meet their basic needs. Students know that organisms are interdependent and part of a food chain. The students investigate the life cycle of animals and identify likenesses between parents and young.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and

patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;

(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, sieves/sifters, tweezers, primary balance, notebooks, terrariums, aquariums, stream tables, soil samples (loam, sand, gravel, rocks, and clay), seeds, plants, wind-sock, pinwheel, student thermometer, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, flashlights, sandpaper, wax paper, items that are magnetic, non-magnetic items, a variety of magnets, hot plate, aluminum foil, technology, Sun-Moon-Earth model, and plant and animal life cycle models to observe, measure, test, and compare;

(E) collect observations and measurements as evidence;

(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify basic advantages and limitations of models such as their size, properties, and materials;

(B) analyze data by identifying significant features and patterns;

(C) use mathematical concepts to compare two objects with common attributes; and

(D) evaluate a design or object using criteria to determine if it works as intended.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:

(A) explain how science or an innovation can help others; and

(B) identify what scientists and engineers are and explore what different scientists and engineers do.

(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:

(A) identify and use patterns to describe phenomena or design solutions;

(B) investigate and predict cause-and-effect relationships in science;

(C) describe the properties of objects in terms of relative size (scale) and relative quantity;

(D) examine the parts of a whole to define or model a system;

(E) identify forms of energy and properties of matter;

(F) describe the relationship between structure and function of objects, organisms, and systems; and

(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.

(6) Matter and its properties. The student knows that objects have physical properties that determine how they are described and classified. The student is expected to:

(A) classify objects by observable physical properties, including, shape, color, and texture, and attributes such as larger and smaller and heavier and lighter;

(B) explain and predict changes in materials caused by heating and cooling; and

(C) demonstrate and explain that a whole object is a system made of organized parts such as a toy that can be taken apart and put back together.

(7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to:

(A) explain how pushes and pulls can start, stop, or change the speed or direction of an object's motion; and

(B) plan and conduct a descriptive investigation that predicts how pushes and pulls can start, stop, or change the speed or direction of an object's motion.

(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:

(A) investigate and describe applications of heat in everyday life such as cooking food or using a hair dryer; and

(B) describe how some changes caused by heat may be reversed such as melting butter and other changes cannot be reversed such as cooking an egg or baking a cake.

(9) Earth and space. The student knows that the natural world has recognizable patterns. The student is expected to describe and predict the patterns of seasons of the year such as order of occurrence and changes in nature.

(10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:

(A) investigate and document the properties of particle size, shape, texture, and color and the components of different types of soils such as topsoil, clay, and sand;

(B) investigate and describe how water can move rock and soil particles from one place to another;

(C) compare the properties of puddles, ponds, streams, rivers, lakes, and oceans, including color, clarity, size, shape, and whether it is freshwater or saltwater; and

(D) describe and record observable characteristics of weather, including hot or cold, clear or cloudy, calm or windy, and rainy or icy, and explain the impact of weather on daily choices.

(11) Earth and space. The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:

(A) identify and describe how plants, animals, and humans use rocks, soil, and water; and

(B) describe ways to conserve and protect natural sources of water such as turning off the faucet when brushing teeth and keeping trash out of bodies of water.

(12) Organisms and environments. The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to:

(A) classify living and nonliving things based upon whether they have basic needs and produce young;

(B) describe and record examples of interactions and dependence between living and nonliving components in terrariums or aquariums; and

(C) identify and illustrate how living organisms depend on each other through food chains.

(13) Organisms and environments. The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:

(A) identify the external structures of different animals and compare how those structures help different animals live, move, and meet basic needs for survival;

(B) record observations of and describe basic life cycles of animals, including a bird, a mammal, and a fish; and

(C) compare ways that young animals resemble their parents.

§112.4. Science, Grade 2, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation in science. In Grade 2, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 60% of instructional time.

(B) Matter and its properties. Students build upon their knowledge of the natural world using their senses. The students focus on physical properties of matter and determine how observable properties can be changed through various processes. Students use these processes to form new objects.

(C) Force, motion, and energy. Students know that force and motion are related and that energy exists in many forms as a part of everyday life. Magnetism interacts with various materials and can be used as a push and pull. The students investigate sound energy and focus on how sound affects objects.

(D) Earth and space. Students observe objects in the sky, including the Sun and the Moon, and collect and analyze weather data. In addition, students identify natural and manmade resources and how they can be conserved.

(E) Organisms and environments. All living organisms interact with living and nonliving things within their environments and use structures to meet their basic needs. Students understand that organisms are interdependent and part of a food chain. The students investigate the life cycle of animals and identify likenesses between parents and young.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have

been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;

(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, notebooks, stream tables, soil, sand, gravel, flowering plants, student thermometer, demonstration thermometer, rain gauge, flashlights, ramps, balls, spinning tops, drums, tuning forks, sandpaper, wax paper, items that are flexible, non-flexible items, magnets, hot plate, aluminum foil, technology, Sun-Moon-Earth model, and frog and butterfly life cycle models to observe, measure, test, and compare;

(E) collect observations and measurements as evidence;

(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify basic advantages and limitations of models such as their size, properties, and materials;

(B) analyze data by identifying significant features and patterns;

(C) use mathematical concepts to compare two objects with common attributes; and

(D) evaluate a design or object using criteria to determine if it works as intended.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:

(A) explain how science or an innovation can help others; and

(B) identify what scientists and or engineers are and explore what different scientists and engineers do.

(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:

(A) identify and use patterns to describe phenomena or design solutions;

(B) investigate and predict cause-and-effect relationships in science;

(C) measure and describe the properties of objects in terms of size and quantity;

(D) examine the parts of a whole to define or model a system;

(E) identify forms of energy and properties of matter;

(F) describe the relationship between structure and function of objects, organisms, and systems; and

(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.

(6) Matter and its properties. The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:

(A) classify matter by observable physical properties, including texture, flexibility, and relative temperature, and identify whether a material is a solid or liquid;

(B) conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing; and

(C) demonstrate that small units such as building blocks can be combined or reassembled to form new objects for different pur-

poses and explain the materials chosen based on their physical properties.

(7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to:

(A) explain how objects push on each other and may change shape when they touch or collide; and

(B) plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an object's motion.

(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:

(A) demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound;

(B) explain how different levels of sound are used in everyday life such as a whisper in a classroom or a fire alarm; and

(C) design and build a device using tools and materials that uses sound to solve the problem of communicating over a distance.

(9) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

(A) describe the Sun as a star that provides light and heat and explain that the Moon reflects the Sun's light; and

(B) observe and compare how objects in the sky are more visible and can appear different with a telescope than with an unaided eye.

(10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:

(A) investigate and describe how wind and water move soil and rock particles across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows;

(B) measure, record, and graph weather information, including temperature and precipitation; and

(C) investigate different types of severe weather events such as a hurricane, tornado, or flood and explain that some events are more likely than others in a given region.

(11) Earth and space. The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:

(A) distinguish between natural and manmade resources; and

(B) describe how human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing, or recycling paper, plastic, and metal.

(12) Organisms and environments. The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to:

(A) describe how the physical characteristics of environments, including the amount of rainfall, support plants and animals within an ecosystem;

(B) create and describe food chains identifying producers and consumers to demonstrate how animals depend on other living things; and

(C) explain and demonstrate how some plants depend on other living things, wind, or water for pollination and to move their seeds around.

(13) Organisms and environments. The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:

(A) identify the roots, stems, leaves, flowers, fruits, and seeds of plants and compare how those structures help different plants meet their basic needs for survival;

(B) record and compare how the structures and behaviors of animals help them find and take in food, water, and air;

(C) record and compare how being part of a group helps animals obtain food, defend themselves, and cope with changes; and

(D) investigate and describe some of the unique life cycles of animals where young animals do not resemble their parents, including butterflies and frogs.

§112.5. Science, Grade 3, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 3, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 60% of instructional time.

(B) Matter and energy. Students build upon the knowledge learned in Kindergarten-Grade 2 by investigating the physical properties of matter. Students explore states of matter and observe that changes can occur to matter through heating and cooling. The students explore using substances by combining them to create or modify objects based on their physical properties.

(C) Force, motion, and energy. Students manipulate objects by pushing and pulling to demonstrate changes in motion and position. Students also identify forces such as magnetism and gravity. Students understand energy exists in many forms, including mechani-

cal, thermal, light, and sound. The students identify forms of energy in everyday life.

(D) Earth and space. Students learn that there are recognizable processes that change the Earth over time. Students compare day-to-day changes in weather. They also investigate how soil is formed through the processes of weathering and decomposition. Students model rapid changes to Earth's surface as well as explore ways to conserve Earth's resources. Students recognize that there are identifiable objects and patterns in Earth's solar system. Students model the orbits of the Sun, Earth, and Moon as well as describe their relationship to each other. This will set the foundation for Grade 4 when they look at changes in the appearance of the Moon. Students also identify the sequence of the planets in Earth's solar system.

(E) Organisms and environments. Students explore patterns, systems, and cycles within environments by investigating characteristics of organisms, life cycles, and interactions among all components of the natural environment. Students examine how environment and the structures and functions of animals play a key role in survival. Students know that when changes in the environment occur, organisms may thrive, become ill, or perish. Students also examine fossils as evidence of past living organisms.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive investigations and use engineering practices to design solutions to problems;

(C) demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including hand lenses; metric rulers; Celsius thermometers; wind vanes; rain gauges; graduated cylinders; beakers; digital scales; hot plates; meter sticks; magnets; notebooks; Sun, Earth, Moon system models; timing devices; materials to support observation of habitats of organisms such as terrariums, aquariums, and collecting nets; and materials to support digital data collection such as computers, tablets, and cameras, to observe, measure, test, and analyze information;

(E) collect observations and measurements as evidence;

(F) construct appropriate graphic organizers to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant features, patterns, or sources of error;

(C) use mathematical calculations to compare patterns and relationships; and

(D) evaluate a design or object using criteria.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:

(A) explain how scientific discoveries and innovative solutions to problems impact science and society; and

(B) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.

(5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:

(A) identify and use patterns to explain scientific phenomena or to design solutions;

(B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;

(C) use scale, proportion, and quantity to describe, compare, or model different systems;

(D) examine and model the parts of a system and their interdependence in the function of the system;

(E) investigate the flow of energy and cycling of matter through systems;

(F) explain the relationship between the structure and function of objects, organisms, and systems; and

(G) explain how factors or conditions impact stability and change in objects, organisms, and systems.

(6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:

(A) measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float in water;

(B) describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container;

(C) predict, observe, and record changes in the state of matter caused by heating or cooling in a variety of substances such as ice becoming liquid water, condensation forming on the outside of a glass, or liquid water being heated to the point of becoming water vapor (gas); and

(D) demonstrate that materials can be combined based on their physical properties to create or modify objects such as building a tower or adding clay to sand to make a stronger brick and justify the selection of materials based on their physical properties.

(7) Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions. The student is expected to:

(A) demonstrate and describe forces acting on an object in contact or at a distance, including magnetism, gravity, and pushes and pulls; and

(B) plan and conduct a descriptive investigation to demonstrate and explain how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons.

(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems. The student is expected to:

(A) identify everyday examples of energy, including light, sound, thermal, and mechanical; and

(B) plan and conduct investigations that demonstrate how the speed of an object is related to its mechanical energy.

(9) Earth and space. The student knows there are recognizable objects and patterns in Earth's solar system. The student is expected to:

(A) construct models and explain the orbits of the Sun, Earth, and Moon in relation to each other; and

(B) identify the sequence of the planets in Earth's solar system in relation to the Sun.

(10) Earth and space. The student knows that there are recognizable processes that change Earth over time. The student is expected to:

(A) compare and describe day-to-day weather in different locations at the same time, including air temperature, wind direction, and precipitation;

(B) investigate and explain how soils such as sand and clay are formed by weathering of rock and by decomposition of plant and animal remains; and

(C) model and describe rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides.

(11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to:

(A) explore and explain how humans use natural resources such as in construction, in agriculture, in transportation, and to make products; and

(B) identify ways to conserve natural resources through reducing, reusing, or recycling.

(12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:

(A) explain how temperature and precipitation affect animal growth and behavior through migration and hibernation and plant responses through dormancy;

(B) identify and describe the flow of energy in a food chain and predict how changes in a food chain such as removal of frogs from a pond or bees from a field affect the ecosystem;

(C) describe how natural changes to the environment such as floods and droughts cause some organisms to thrive and others to perish or move to new locations; and

(D) identify fossils as evidence of past living organisms and environments, including common Texas fossils.

(13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that function to help them survive within their environments. The student is expected to:

(A) explore and explain how external structures and functions of animals such as the neck of a giraffe or webbed feet on a duck enable them to survive in their environment; and

(B) explore, illustrate, and compare life cycles in organisms such as beetles, crickets, radishes, or lima beans.

§112.6. Science, Grade 4, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 4, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 50% of instructional time.

(B) Matter and energy. Students investigate matter's measurable properties, including mass, volume, states, temperature, magnetism, and relative density, to determine how it is classified, changed, and used. Students compare and contrast a variety of mixtures, including solutions, and demonstrate that matter is conserved.

(C) Force, motion, and energy. Students investigate forces, including friction, gravity, and magnetism, to observe their effects on objects. They differentiate between mechanical, sound, light, thermal, and electrical energy. Students observe the cycle of energy and the parts of a system while exploring circuits that produce light and thermal energy. They will build on their understanding of circuits in Grade 5. As students explore thermal and electrical energy, they observe the behavior of different materials to identify patterns and label the materials as conductors or insulators.

(D) Earth and space. Students learn about processes on Earth that create patterns of change. These processes include the water cycle, weathering, erosion, deposition, the appearance of the Moon, and seasons. Students will build on this understanding in Grade 5 when they learn about day and night, shadows, and the rotation of Earth on its axis. Finally, students identify Earth's resources and classify them as renewable or nonrenewable.

(E) Organisms and environments. In this strand, students begin to understand how organisms within an ecosystem interact. Students investigate producers to learn how they make food. Students build on their understanding of food chains, from Grade 3, as they explore food webs where they describe the flow of energy and the role of producers, consumers, and decomposers. They also use fossil evidence to describe environments of the past. Additionally, students explore plant structures and their functions. Students also differentiate between inherited and acquired traits of organisms.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and

increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive investigations and use engineering practices to design solutions to problems;

(C) demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including hand lenses; metric rulers; Celsius thermometers; calculators; laser pointers; mirrors; digital scales; balances; graduated cylinders; beakers; hot plates; meter sticks; magnets; notebooks; timing devices; sieves; materials for building circuits; materials to support observation of habitats of organisms such as terrariums, aquariums, and collecting nets; and materials to support digital data collection such as computers, tablets, and cameras, to observe, measure, test, and analyze information;

(E) collect observations and measurements as evidence;

(F) construct appropriate graphic organizers used to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant features, patterns, or sources of error;

(C) use mathematical calculations to compare patterns and relationships; and

(D) evaluate a design or object using criteria.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:

(A) explain how scientific discoveries and innovative solutions to problems impact science and society; and

(B) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.

(5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:

(A) identify and use patterns to explain scientific phenomena or to design solutions;

(B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;

(C) use scale, proportion, and quantity to describe, compare, or model different systems;

(D) examine and model the parts of a system and their interdependence in the function of the system;

(E) investigate how energy flows and matter cycles through systems and how matter is conserved;

(F) explain the relationship between the structure and function of objects, organisms, and systems; and

(G) explain how factors or conditions impact stability and change in objects, organisms, and systems.

(6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:

(A) classify and describe matter using observable physical properties, including temperature, mass, magnetism, relative density (the ability to sink or float in water), and physical state (solid, liquid, gas);

(B) investigate and compare a variety of mixtures, including solutions that are composed of liquids in liquids and solids in liquids; and

(C) demonstrate that matter is conserved when mixtures such as soil and water and oil and water are formed.

(7) Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions. The student is expected to plan and conduct descriptive investigations to explore the patterns of forces such as gravity, friction, or magnetism in contact or at a distance on an object.

(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems. The student is expected to:

(A) investigate and identify the transfer of energy by objects in motion, waves in water, and sound;

(B) identify conductors and insulators of thermal and electrical energy; and

(C) demonstrate and describe how electrical energy travels in a closed path that can produce light and thermal energy.

(9) Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to:

(A) collect and analyze data to identify sequences and predict patterns of change in seasons such as change in temperature and length of daylight; and

(B) collect and analyze data to identify sequences and predict patterns of change in the observable appearance of the Moon from Earth.

(10) Earth and space. The student knows that there are processes on Earth that create patterns of change. The student is expected to:

(A) describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process;

(B) model and describe slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice; and

(C) differentiate between weather and climate.

(11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to:

(A) identify and explain advantages and disadvantages of using Earth's renewable and nonrenewable natural resources such as wind, water, sunlight, plants, animals, coal, oil, and natural gas; and

(B) explain how conservation, disposal, and recycling of natural resources impact the environment.

(12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:

(A) investigate and explain how most producers can make their own food using sunlight, water, and carbon dioxide through the cycling of matter;

(B) describe the cycling of matter and flow of energy through food webs, including the roles of the Sun, producers, consumers, and decomposers; and

(C) identify and describe past environments based on fossil evidence, including common Texas fossils.

(13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that function to help them survive within their environments. The student is expected to:

(A) explore and explain how structures and functions of plants such as waxy leaves and deep roots enable them to survive in their environment; and

(B) differentiate between inherited and acquired physical traits of organisms.

§112.7. Science, Grade 5, Adopted 2021.

(a) Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 5, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(iii) To support instruction in the science content standards, it is recommended that districts integrate scientific and engineering practices through classroom and outdoor investigations for at least 50% of instructional time.

(B) Matter and energy. Students investigate matter expanding their understanding of properties learned in Grade 4 (mass, volume, states, temperature, magnetism, and relative density) to include solubility and the ability to conduct or insulate both thermal and electrical energy. Students observe the combination of substances to make mixtures and develop an understanding of conservation of matter. These concepts lead to the understanding of elements and compounds. Students will build on this understanding in middle school when they learn to determine density and to identify evidence of chemical changes.

(C) Force, motion, and energy. Students investigate equal and unequal forces and the effects these forces have on objects (motion and direction). Additionally, students investigate energy, including mechanical, light, thermal, electrical, and sound. They uncover cycles (e.g., movement of thermal energy), patterns (e.g., behavior of light, including reflection and refraction), and systems through their exploration. Students will build on this understanding in middle school when they begin to use calculations and measurements to study force, motion, and energy through the study of Newton's Laws of Motion.

(D) Earth and space. This strand is focused on identifying recognizable patterns and processes as students learn about Earth's rotation and demonstrate the effects this movement has on Earth's surface, including day and night, shadows, and the rotation of Earth on its axis. Students continue their learning of patterns and processes on Earth while exploring weather, climate, the water cycle, the formation of sedimentary rock and fossil fuels, and the formation of landforms. Finally, students learn ways to manage natural resources to support a healthy environment.

(E) Organisms and environments. This strand focuses on identifying relationships, systems, and cycles within organisms and environments. Students describe the interactions of biotic and abiotic factors in an ecosystem. Students build on their understanding of food webs from Grade 4 by predicting how ecosystem changes affect the flow of energy. Additionally, they describe how humans impact the ecosystem. Students also learn how organisms' structures help them to survive, and they distinguish between instinctual and learned behaviors in animals. This will set the foundation for Grade 6 where students compare and contrast variations within organisms and how they impact survival.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in sys-

tems as patterns and can be observed, measured, and modeled. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive and simple experimental investigations and use engineering practices to design solutions to problems;

(C) demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use tools, including calculators, microscopes, hand lenses, metric rulers, Celsius thermometers, prisms, concave and convex lenses, laser pointers, mirrors, digital scales, balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, notebooks, timing devices, materials for building circuits, materials to support observations of habitats or organisms such as terrariums and aquariums, and materials to support digital data collection such as computers, tablets, and cameras to observe, measure, test, and analyze information;

(E) collect observations and measurements as evidence;

(F) construct appropriate graphic organizers used to collect data, including tables, bar graphs, line graphs, tree maps, concept maps, Venn diagrams, flow charts or sequence maps, and input-output tables that show cause and effect; and

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant features, patterns, or sources of error;

(C) use mathematical calculations to compare patterns and relationships; and

(D) evaluate experimental and engineering designs.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:

(A) explain how scientific discoveries and innovative solutions to problems impact science and society; and

(B) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.

(5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:

(A) identify and use patterns to explain scientific phenomena or to design solutions;

(B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;

(C) use scale, proportion, and quantity to describe, compare, or model different systems;

(D) examine and model the parts of a system and their interdependence in the function of the system;

(E) investigate how energy flows and matter cycles through systems and how matter is conserved;

(F) explain the relationship between the structure and function of objects, organisms, and systems; and

(G) explain how factors or conditions impact stability and change in objects, organisms, and systems.

(6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:

(A) compare and contrast matter based on measurable, testable, or observable physical properties, including mass, magnetism, relative density (sinking and floating using water as a reference point), physical state (solid, liquid, gas), volume, solubility in water, and the ability to conduct or insulate thermal energy and electric energy;

(B) demonstrate and explain that some mixtures maintain physical properties of their substances such as iron filings and sand and sand and water;

(C) compare the properties of substances before and after they are combined into a solution and demonstrate that matter is conserved in solutions; and

(D) illustrate how matter is made up of particles that are too small to be seen such as air in a balloon.

(7) Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions. The student is expected to:

(A) investigate and explain how equal and unequal forces acting on an object cause patterns of motion and transfer of energy; and

(B) design a simple experimental investigation that tests the effect of force on an object in a system such as a car on a ramp or a balloon rocket on a string.

(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems. The student is expected to:

(A) investigate and describe the transformation of energy in systems such as energy in a flashlight battery that changes from chemical energy to electrical energy to light energy;

(B) demonstrate that electrical energy in complete circuits can be transformed into motion, light, sound, or thermal energy and identify the requirements for a functioning electrical circuit; and

(C) demonstrate and explain how light travels in a straight line and can be reflected and refracted.

(9) Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours and explain how that causes the day/night cycle and the appearance of the Sun moving across the sky, resulting in changes in shadow positions and shapes.

(10) Earth and space. The student knows that there are recognizable patterns and processes on Earth. The student is expected to:

(A) explain how the Sun and the ocean interact in the water cycle and affect weather;

(B) model and describe the processes that led to the formation of sedimentary rocks and fossil fuels; and

(C) model and identify how changes to Earth's surface by wind, water, or ice result in the formation of landforms, including deltas, canyons, and sand dunes.

(11) Earth and space. The student understands how natural resources are important and can be managed. The student is expected to design and explain solutions such as conservation, recycling, or proper disposal to minimize environmental impact of the use of natural resources.

(12) Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to:

(A) observe and describe how a variety of organisms survive by interacting with biotic and abiotic factors in a healthy ecosystem;

(B) predict how changes in the ecosystem affect the cycling of matter and flow of energy in a food web; and

(C) describe a healthy ecosystem and how human activities can be beneficial or harmful to an ecosystem.

(13) Organisms and environments. The student knows that organisms undergo similar life processes and have structures and behaviors that help them survive within their environments. The student is expected to:

(A) analyze the structures and functions of different species to identify how organisms survive in the same environment; and

(B) explain how instinctual behavioral traits such as turtle hatchlings returning to the sea and learned behavioral traits such as orcas hunting in packs increase chances of survival.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Director, Rulemaking

Texas Education Agency

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 475-1497



SUBCHAPTER B. MIDDLE SCHOOL

19 TAC §§112.25 - 112.28

STATUTORY AUTHORITY. The new sections are proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; and TEC, §28.002(j), which allows the SBOE to require laboratory instruction in secondary science courses and require a specific amount or percentage of time in a secondary science course that must be laboratory instruction.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §7.102(c)(4) and §28.002(a), (c), and (j).

§112.25. Implementation of Texas Essential Knowledge and Skills for Science, Middle School, Adopted 2021.

(a) The provisions of §§112.26-112.28 of this subchapter shall be implemented by school districts.

(b) No later than July 31, 2023, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for science as adopted in §§112.26-112.28 of this subchapter.

(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§112.26-112.28 of this subchapter shall be implemented beginning with the 2024-2025 school year and apply to the 2024-2025 and subsequent school years.

(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than July 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§112.26-112.28 of this subchapter shall be implemented for the following school year.

(e) Sections 112.18-112.20 of this subchapter shall be superseded by the implementation of §§112.26-112.28 of this subchapter.

§112.26. Science, Grade 6, Adopted 2021.

(a) Introduction.

(1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 6, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(B) Matter and energy. Students build upon their knowledge of properties of solids, liquids, and gases and further explore their molecular energies. In Grade 6, students learn how elements are classified as metals, nonmetals, or metalloids based on their properties on the Periodic Table. Students have previous experience with mixtures in Grade 5. Grade 6 furthers their understanding by investigating the different types of mixtures. Subsequent grades will learn about compounds. In Grade 6, students compare the density of substances relative to fluids and identify evidence of chemical changes.

(C) Force, motion, and energy. Students investigate the relationship between force and motion using a variety of means, including calculations and measurements through the study of Newton's Third Law of Motion. Subsequent grades will study force and motion through Newton's First and Second Laws of Motion. Energy occurs as either potential or kinetic energy. Potential energy can take several forms, including gravitational, elastic, and chemical energy. Energy is conserved throughout systems by changing from one form to another and transfers through waves.

(D) Earth and space. Cycles within Sun, Earth, and Moon systems are studied as students learn about seasons and tides. Students identify that the Earth is divided into spheres and examine the processes within and organization of the geosphere. Researching the advantages and disadvantages of short- and long-term uses of resources enables informed decision making about resource management.

(E) Organisms and environments. All living organisms are made up of smaller units called cells. Ecosystems are organized into communities, populations, and organisms. Students compare and contrast variations within organisms and how they impact survival. Students examine relationships and interactions between organisms, biotic factors, and abiotic factors in an ecosystem.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside

the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, and hand lenses;

(E) collect quantitative data using the International System of Units (SI) and qualitative data as evidence;

(F) construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content;

(B) make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.

(5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:

(A) identify and apply patterns to understand and connect scientific phenomena or to design solutions;

(B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;

(C) analyze how differences in scale, proportion, or quantity affect a system's structure or performance;

(D) examine and model the parts of a system and their interdependence in the function of the system;

(E) analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems;

(F) analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems; and

(G) analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.

(6) Matter and energy. The student knows that matter is made of atoms, can be classified according to its properties, and can undergo changes. The student is expected to:

(A) compare solids, liquids, and gases in terms of their structure, shape, volume, and kinetic energy of atoms and molecules;

(B) investigate the physical properties of matter to distinguish between pure substances, homogeneous mixtures (solutions), and heterogeneous mixtures;

(C) classify elements on the periodic table as metals, nonmetals, and metalloids using their physical properties;

(D) compare the density of substances relative to various fluids; and

(E) identify the formation of a new substance by using the evidence of a possible chemical change, including production of a gas, change in thermal energy, production of a precipitate, and color change.

(7) Force, motion, and energy. The student knows the nature of forces and their role in systems that experience stability or change. The student is expected to:

(A) identify and explain how forces act on objects, including gravity, friction, magnetism, applied forces, and normal forces, using real-world applications;

(B) calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced; and

(C) identify simultaneous force pairs that are equal in magnitude and opposite in direction that result from the interactions between objects using Newton's Third Law of Motion.

(8) Force, motion, and energy. The student knows that the total energy in systems is conserved through energy transfers and transformations. The student is expected to:

(A) compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy;

(B) describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis; and

(C) explain how energy is transferred through transverse and longitudinal waves.

(9) Earth and space. The student models the cyclical movements of the Sun, Earth, and Moon and describes their effects. The student is expected to:

(A) model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons; and

(B) describe and predict how the positions of the Earth, Sun, and Moon cause daily, spring, and neap cycles of ocean tides due to gravitational forces.

(10) Earth and space. The student understands the rock cycle and the structure of Earth. The student is expected to:

(A) differentiate between the biosphere, hydrosphere, atmosphere, and geosphere and identify components of each system;

(B) model and describe the layers of Earth, including the inner core, outer core, mantle, and crust; and

(C) describe how metamorphic, igneous, and sedimentary rocks form and change through geologic processes in the rock cycle.

(11) Earth and space. The student understands how resources are managed. The student is expected to research and describe why resource management is important and how conservation, increased efficiency, and technology can help manage air, water, soil, and energy resources.

(12) Organisms and environments. The student knows that interdependence occurs between living systems and the environment. The student is expected to:

(A) investigate how organisms and populations in an ecosystem depend on and may compete for biotic factors such as food and abiotic factors such as availability of light and water, range of temperatures, or soil composition;

(B) describe and give examples of predatory, competitive, and symbiotic relationships between organisms, including mutualism, parasitism, and commensalism; and

(C) describe the hierarchical organization of organism, population, and community within an ecosystem.

(13) Organisms and environments. The student knows that organisms have an organizational structure and variations can influence survival of populations. The student is expected to:

(A) describe the historical development of cell theory and explain how organisms are composed of one or more cells, which come from pre-existing cells and are the basic unit of structure and function;

(B) identify and compare the basic characteristics of organisms, including prokaryotic and eukaryotic, unicellular and multicellular, and autotrophic and heterotrophic; and

(C) describe how variations within a population can be an advantage or disadvantage to the survival of a population as environments change.

§112.27. Grade 7, Adopted 2021.

(a) Introduction.

(1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 7, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve pro-

cesses similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(B) Matter and energy. Students have prior experience with elements in Grade 6 and develop an understanding that compounds are also pure substances in Grade 7. Students investigate the differences between elements and compounds through observations, descriptions of physical properties, and chemical reactions. Students build upon their understanding of solutions by exploring aqueous solutions.

(C) Force, motion, and energy. Students measure, calculate, graph, and investigate how forces impact linear motion. Students build upon their understanding of the laws of motions by exploring Newton's First Law of Motion. Temperature is a measure of the average kinetic energy of molecules. Thermal energy is transferred by conduction, convection, or radiation in order to reach thermal equilibrium.

(D) Earth and space. Students explore characteristics and organization of objects and the role of gravity within our solar system. Earth has a specific set of characteristics that allows life to exist. Students further their understanding of the geosphere by illustrating how Earth's features change over time through tectonic movement. Students investigate how humans depend on and affect the hydrosphere.

(E) Organisms and environments. Students further their understanding of organisms as systems made up of cells organized into tissues, tissues into organs, and organs into organ systems by identifying the main functions of the organs within the human body. During both sexual and asexual reproduction, traits are passed on to the next generation. Students understand how traits in populations can change through the processes of natural and artificial selection. Students analyze how energy flows through trophic levels and how biodiversity impacts an ecosystem's sustainability. Students gain an understanding of the taxonomic classifications of organisms and how characteristics determine their classification.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, and hand lenses;

(E) collect quantitative data using the International System of Units (SI) and qualitative data as evidence;

(F) construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content;

(B) make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.

(5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:

(A) identify and apply patterns to understand and connect scientific phenomena or to design solutions;

(B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;

(C) analyze how differences in scale, proportion, or quantity affect a system's structure or performance;

(D) examine and model the parts of a system and their interdependence in the function of the system;

(E) analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems;

(F) analyze and explain the complementary relationship between structure and function of objects, organisms, and systems; and

(G) analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.

(6) Matter and energy. The student distinguishes between elements and compounds, classifies changes in matter, and understands the properties of solutions. The student is expected to:

(A) compare and contrast elements and compounds in terms of atoms and molecules, chemical symbols, and chemical formulas;

(B) distinguish between physical and chemical changes in matter;

(C) describe aqueous solutions in terms of solute and solvent, concentration, and dilution; and

(D) investigate and model how temperature, surface area, and agitation affect the rate of dissolution of solid solutes in aqueous solutions.

(7) Force, motion, and energy. The student describes the cause-and-effect relationship between force and motion. The student is expected to:

(A) calculate average speed using distance and time measurements from investigations;

(B) distinguish between speed and velocity in linear motion in terms of distance, displacement, and direction;

(C) measure, record, and interpret an object's motion using distance-time graphs; and

(D) analyze the effect of balanced and unbalanced forces on the state of motion of an object using Newton's First Law of Motion.

(8) Force, motion, and energy. The student understands the behavior of thermal energy as it flows into and out of systems. The student is expected to:

(A) investigate methods of thermal energy transfer into and out of systems, including conduction, convection, and radiation;

(B) investigate how thermal energy moves in a predictable pattern from warmer to cooler until all substances within the system reach thermal equilibrium; and

(C) explain the relationship between temperature and the kinetic energy of the particles within a substance.

(9) Earth and space. The student understands the patterns of movement, organization, and characteristics of components of our solar system. The student is expected to:

(A) describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, comets, Kuiper belt, and Oort cloud;

(B) describe how gravity governs motion within Earth's solar system; and

(C) analyze the characteristics of Earth that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere.

(10) Earth and space. The student understands the causes and effects of plate tectonics. The student is expected to:

(A) describe the evidence that supports that Earth has changed over time, including fossil evidence, plate tectonics, and superposition; and

(B) describe how plate tectonics causes ocean basin formation, earthquakes, mountain building, and volcanic eruptions, including supervolcanoes and hot spots.

(11) Earth and space. The student understands how human activity can impact the hydrosphere. The student is expected to:

(A) analyze the beneficial and harmful influences of human activity on groundwater and surface water in a watershed; and

(B) describe human dependence and influence on ocean systems and explain how human activities impact these systems.

(12) Organisms and environments. The student understands that ecosystems are dependent upon the cycling of matter and the flow of energy. The student is expected to:

(A) diagram the flow of energy within trophic levels and describe how the available energy decreases in successive trophic levels in energy pyramids; and

(B) describe how ecosystems are sustained by the continuous flow of energy and the recycling of matter and nutrients within the biosphere.

(13) Organisms and environments. The student knows how systems are organized and function to support the health of an organism and how traits are inherited. The student is expected to:

(A) identify and model the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, urinary, reproductive, integumentary, nervous, immune, and endocrine systems;

(B) describe the hierarchical organization of cells, tissues, organs, and organ systems within plants and animals;

(C) compare the results of asexual and sexual reproduction of plants and animals in relation to the diversity of offspring and the changes in the population over time; and

(D) describe and give examples of how natural and artificial selection change the occurrence of traits in a population over generations.

(14) Organisms and environments. The student knows how the taxonomic system is used to describe relationships between organisms. The student is expected to:

(A) describe the taxonomic system that categorizes organisms based on similarities and differences shared among groups; and

(B) describe the characteristics of the recognized kingdoms and their importance in ecosystems such as bacteria aiding digestion or fungi decomposing organic matter.

§112.28. Grade 8, Adopted 2021.

(a) Introduction.

(1) In Grades 6 through 8 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 8, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the grade level and question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(i) Scientific practices. Students ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(ii) Engineering practices. Students identify problems and design solutions using appropriate tools and models.

(B) Matter and energy. Students make connections between elements, compounds, and mixtures that were introduced in prior grade levels. Students examine the properties of water, acids, and bases. In addition, students understand the basic concept of conservation of mass using chemical equations.

(C) Force, motion, and energy. Students are introduced to Newton's Second Law of Motion and investigate how all three laws of motion act simultaneously within systems. Students understand that waves transfer energy and further explore the characteristics and applications of waves.

(D) Earth and space. Students learn that stars and galaxies are part of the universe. In addition, students use data to research scientific theories of the origin of the universe. Students learn how interactions in solar, weather, and ocean systems create changes in weather patterns and climate. In addition, students understand that climate can be impacted by natural events and human activities.

(E) Organisms and environments. Students identify the function of organelles. Traits are contained in genetic material that is found on genes within a chromosome from the parent. These traits influence the success of a species over time. Students explore how organisms and their populations respond to environmental changes, including those caused by human activities.

(2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(3) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students distinguish between scientific decision-making practices and ethical and social decisions that involve science.

(5) Recurring themes and concepts. Science consists of recurring themes and making connections between overarching concepts. Recurring themes include structure and function, systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Models have limitations but provide a tool for understanding the ideas presented. Students analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(6) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and skills.

(1) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) use scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as graduated cylinders, metric rulers, periodic tables, balances, scales, thermometers, temperature probes, laboratory ware, timing devices, pH indicators, hot plates, models, microscopes, slides, life science models, petri dishes, dissecting kits, magnets, spring scales or force sensors, tools that model wave behavior, satellite images, weather maps, and hand lenses;

(E) collect quantitative data using the International System of Units (SI) and qualitative data as evidence;

(F) construct appropriate tables, graphs, maps, and charts using repeated trials and means to organize data;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying any significant descriptive statistical features, patterns, sources of error, or limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) relate the impact of past and current research on scientific thought and society, including the process of science, cost-benefit analysis, and contributions of diverse scientists as related to the content;

(B) make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field to investigate STEM careers.

(5) Recurring themes and concepts. The student understands that recurring themes and concepts provide a framework for making connections across disciplines. The student is expected to:

(A) identify and apply patterns to understand and connect scientific phenomena or to design solutions;

(B) identify and investigate cause-and-effect relationships to explain scientific phenomena or analyze problems;

(C) analyze how differences in scale, proportion, or quantity affect a system's structure or performance;

(D) examine and model the parts of a system and their interdependence in the function of the system;

(E) analyze and explain how energy flows and matter cycles through systems and how energy and matter are conserved through a variety of systems;

(F) analyze and explain the complementary relationship between the structure and function of objects, organisms, and systems; and

(G) analyze and explain how factors or conditions impact stability and change in objects, organisms, and systems.

(6) Matter and energy. The student understands that matter can be classified according to its properties and matter is conserved in chemical changes that occur within closed systems. The student is expected to:

(A) explain by modeling how matter is classified as elements, compounds, homogeneous mixtures, or heterogeneous mixtures;

(B) describe the properties of cohesion, adhesion, and surface tension in water and relate to observable phenomena such as the formation of droplets, transport in plants, and insects walking on water;

(C) compare and contrast the properties of acids and bases, including pH relative to water, sour or bitter taste, and how these substances feel to the touch; and

(D) investigate how mass is conserved in chemical reactions and relate conservation of mass to the rearrangement of atoms using chemical equations, including photosynthesis.

(7) Force, motion, and energy. The student understands the relationship between force and motion within systems. The student is expected to:

(A) calculate and analyze how the acceleration of an object is dependent upon the net force acting on the object and the mass of the object using Newton's Second Law of Motion; and

(B) investigate and describe how Newton's three laws of motion act simultaneously within systems such as in vehicle restraints, sports activities, amusement park rides, Earth's tectonic activities, and rocket launches.

(8) Force, motion, and energy. The student knows how energy is transferred through waves. The student is expected to:

(A) compare the characteristics of amplitude, frequency, and wavelength in transverse waves, including the electromagnetic spectrum; and

(B) explain the use of electromagnetic waves in applications such as radiation therapy, wireless technologies, fiber optics, microwaves, ultraviolet sterilization, astronomical observations, and X-rays.

(9) Earth and space. The student describes the characteristics of the universe and the relative scale of its components. The student is expected to:

(A) describe the life cycle of stars and compare and classify stars using the Hertzsprung-Russell diagram;

(B) categorize galaxies as spiral, elliptical, and irregular and locate Earth's solar system within the Milky Way galaxy; and

(C) research and analyze scientific data used as evidence to develop scientific theories that describe the origin of the universe.

(10) Earth and space. The student knows that interactions between Earth, ocean, and weather systems impact climate. The student is expected to:

(A) describe how energy from the Sun, hydrosphere, and atmosphere interact and influence weather and climate;

(B) identify global patterns of atmospheric movement and how they influence local weather; and

(C) describe the interactions between ocean currents and air masses that produce tropical cyclones, including typhoons and hurricanes.

(11) Earth and space. The student knows that natural events and human activity can impact global climate. The student is expected to:

(A) use scientific evidence to describe how natural events, including volcanic eruptions, meteor impacts, abrupt changes in ocean currents, and the release and absorption of greenhouse gases influence climate;

(B) use scientific evidence to describe how human activities such as the release of greenhouse gases, deforestation, and urbanization can influence climate; and

(C) describe efforts to mitigate climate change, including a reduction in greenhouse gas emissions.

(12) Organisms and environments. The student understands stability and change in populations and ecosystems. The student is expected to:

(A) explain how disruptions such as population changes, natural disasters, and human intervention impact the transfer of energy in food webs in ecosystems;

(B) describe how primary and secondary ecological succession affect populations and species diversity after ecosystems are disrupted by natural events or human activity; and

(C) describe how biodiversity contributes to the stability and sustainability of an ecosystem and the health of the organisms within the ecosystem.

(13) Organisms and environments. The student knows how cell functions support the health of an organism and how adaptation and variation relate to survival. The student is expected to:

(A) identify the function of the cell membrane, cell wall, nucleus, ribosomes, cytoplasm, mitochondria, chloroplasts, and vacuoles in plant or animal cells;

(B) describe the function of genes within chromosomes in determining inherited traits of offspring; and

(C) describe how variations of traits within a population lead to structural, behavioral, and physiological adaptations that influence the likelihood of survival and reproductive success of a species over generations.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Director, Rulemaking

Texas Education Agency

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 475-1497



CHAPTER 127. TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR CAREER DEVELOPMENT

The State Board of Education (SBOE) proposes new §§127.316, 127.319-127.321, 127.324-127.326, 127.416-127.433, 127.482, 127.651, 127.652, 127.778-127.782, and 127.785-127.791, concerning Texas Essential Knowledge and Skills (TEKS) for career development. The proposed new sections would update the standards to ensure the standards remain current and better support the revised career and technical education (CTE) programs of study.

BACKGROUND INFORMATION AND JUSTIFICATION: In accordance with statutory requirements that the SBOE by rule identify the essential knowledge and skills of each subject in the required curriculum, the SBOE follows a board-approved cycle to review and revise the essential knowledge and skills for each subject.

At the January 2021 meeting, the board held a work session to discuss the timeline for the TEKS review and revision process and associated activities, including updates to State Board for Educator Certification teacher assignment rules and certification exams, adoption of instructional materials, and the completion of the Texas Resource Review. Texas Education Agency (TEA) staff provided an overview of CTE programs of study and a skills

gap analysis that is being completed to inform review and revision of the CTE TEKS.

Also during the January 2021 meeting, staff provided an update on plans for the review and revision of CTE courses that satisfy a science graduation requirement as well as certain courses in the health science, education and training, and science, technology, engineering, and mathematics (STEM) programs of study. Applications to serve on these CTE TEKS review work groups were posted on the TEA website in December 2020. TEA staff provided SBOE members applications for approval to serve on a CTE work group at the January 2021 SBOE meeting. Additional applications were provided to SBOE members in February and March 2021. Work groups were convened from March-July 2021 to develop recommendations for the CTE courses. At the June 2021 SBOE meeting, a discussion item for proposed new CTE courses was presented to the board.

Currently, CTE courses are codified in 19 TAC Chapter 130. Due to the current structure of Chapter 130, there are not enough section numbers available to add all of the proposed new courses in their assigned subchapters. To accommodate the addition of these new courses and future courses, the CTE TEKS in Chapter 130 are proposed to be moved to existing 19 TAC Chapter 127, Texas Essential Knowledge and Skills for Career Development, and that the chapter be renamed "Texas Essential Knowledge and Skills for Career Development and Career and Technical Education." The move of CTE subchapters from Chapter 130 to Chapter 127 will take place over time as the TEKS in each subchapter are revised.

The proposed new sections address the areas of education and training, health science, hospitality and tourism, law and public service, and STEM and would introduce new standards for early learning, healthcare administration, nursing, pharmacy, and computer-aided design. The proposal recommends that the new sections be implemented over the course of three school years from 2022-2023 to 2024-2025 in order to allow sufficient time for districts to prepare for the implementation of new standards and for the development of instructional materials and other resources.

The SBOE approved the proposed new sections for first reading and filing authorization at its September 3, 2021 meeting.

FISCAL IMPACT: Monica Martinez, associate commissioner for standards and support services, has determined that for the first five-year period the proposal is in effect (2022-2026), there are no fiscal implications to the state. However, there will be implications for TEA if the state develops professional development to help teachers and administrators understand the revised TEKS. Any professional development that is created would be based on whether TEA received an appropriation for professional development in the next biennium. There may be fiscal implications for school districts and charter schools to implement the proposed revisions to the TEKS, which may include the need for professional development and revisions to district-developed databases, curriculum, and scope and sequence documents. Since curriculum and instruction decisions are made at the local district level, it is difficult to estimate the fiscal impact on any given district.

LOCAL EMPLOYMENT IMPACT: The proposal has no effect on local economy; therefore, no local employment impact statement is required under Texas Government Code, §2001.022.

SMALL BUSINESS, MICROBUSINESS, AND RURAL COMMUNITY IMPACT: The proposal has no direct adverse economic im-

pact for small businesses, microbusinesses, or rural communities; therefore, no regulatory flexibility analysis specified in Texas Government Code, §2006.002, is required.

COST INCREASE TO REGULATED PERSONS: The proposal does not impose a cost on regulated persons, another state agency, a special district, or a local government and, therefore, is not subject to Texas Government Code, §2001.0045.

TAKINGS IMPACT ASSESSMENT: The proposal does not impose a burden on private real property and, therefore, does not constitute a taking under Texas Government Code, §2007.043.

GOVERNMENT GROWTH IMPACT: TEA staff prepared a Government Growth Impact Statement assessment for this proposed rulemaking. During the first five years the proposed rulemaking would be in effect, it would create new regulations by proposing revised CTE TEKS required to be offered by school districts and charter schools.

The proposed rulemaking would not create or eliminate a government program; would not require the creation of new employee positions or elimination of existing employee positions; would not require an increase or decrease in future legislative appropriations to the agency; would not require an increase or decrease in fees paid to the agency; would not expand, limit, or repeal an existing regulation; would not increase or decrease the number of individuals subject to its applicability; and would not positively or adversely affect the state's economy.

PUBLIC BENEFIT AND COST TO PERSONS: Ms. Martinez has determined that for each year of the first five years the proposal is in effect, the public benefit anticipated as a result of enforcing the proposal would be better alignment of the TEKS and coordination of the standards with the adoption of instructional materials. There is no anticipated economic cost to persons who are required to comply with the proposal.

DATA AND REPORTING IMPACT: The proposal would have no data and reporting impact.

PRINCIPAL AND CLASSROOM TEACHER PAPERWORK REQUIREMENTS: TEA has determined that the proposal would not require a written report or other paperwork to be completed by a principal or classroom teacher.

PUBLIC COMMENTS: The public comment period on the proposal begins October 8, 2021, and ends at 5:00 p.m. on November 12, 2021. A form for submitting public comments is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_\(TAC\)/Proposed_State_Board_of_Education_Rules/](https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_(TAC)/Proposed_State_Board_of_Education_Rules/). The SBOE will take registered oral and written comments on the proposal at the appropriate committee meeting in November 2021 in accordance with the SBOE board operating policies and procedures. A request for a public hearing on the proposal submitted under the Administrative Procedure Act must be received by the commissioner of education not more than 14 calendar days after notice of the proposal has been published in the *Texas Register* on October 8, 2021.

SUBCHAPTER G. EDUCATION AND TRAINING

19 TAC §§127.316, 127.319 - 127.321, 127.324 - 127.326

STATUTORY AUTHORITY. The new sections are proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum

and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum required in TEC, §28.002; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; TEC, §28.025(b-2), which requires the SBOE by rule to allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content; and TEC, §28.025(b-17), which requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2) and (b-17).

§127.316. Principles of Education and Training (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Principles of Education and Training is designed to introduce learners to the various careers within the Education and Training Career Cluster. Students use self-knowledge as well as educational and career information to analyze various careers within the Education and Training Career Cluster. Students are introduced to societal influences of education and various school models. Additionally, students learn the role and responsibilities of a classroom educator. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills required by the education profession and related occupations. The student is expected to:

(A) demonstrate written communication skills;

(B) perform job-appropriate numerical and arithmetic applications;

(C) practice various forms of communication such as verbal and non-verbal communication used in educational and career settings;

(D) exhibit teamwork skills;

(E) analyze the impact of current decision making on short- and long-term career plans;

(F) identify and implement problem-solving techniques;

(G) identify conflict-management skills;

(H) describe effective leadership skills;

(I) describe productive work habits such as being organized, managing time, and taking initiative;

(J) demonstrate professionalism, including appropriate attire expected of professionals in educational settings; and

(K) identify effective work ethic practices.

(2) The student identifies strategies that promote health and wellness to address the unique challenges of educators in balancing work and personal responsibilities. The student is expected to:

(A) explain common signs of stress and anxiety;

(B) describe appropriate boundaries for a healthy work-life balance;

(C) discuss the impacts of an education career on personal lifestyle such as impacts on time, earning potential, community presence and involvement, health and wellness, and family;

(D) describe appropriate boundaries for a healthy work-life balance; and

(E) discuss strategies to manage health and wellness.

(3) The student recognizes the impact of social media and web-based applications on the education process. The student is expected to:

(A) demonstrate appropriate use of social media for educational purposes; and

(B) identify web-based resources that can be used in the education process.

(4) The student investigates the range of employment opportunities in the education and training field. The student is expected to:

(A) identify and investigate career opportunities in education and training;

(B) investigate additional occupations in education and training such as professional support services, administration, county extension agent, and corporate trainer;

(C) compare transferable skills among a variety of careers in education and; and

(D) analyze results from personal assessments such as how results from career interest and ability inventories relate to skills necessary for success in education and training occupations.

(5) The student explains societal impacts on the education and training field. The student is expected to:

(A) investigate trends or issues that have influenced the development of education across the United States such as historical, societal, cultural, and political trends and issues;

(B) explain pedagogy and andragogy theory;

(C) predict the education and training job market using information from sources such as labor market information, technology, and societal or economic trends; and

(D) summarize the role of family/caregiver in education.

(6) The student describes the characteristics of different educational and training environments. The student is expected to:

(A) summarize the various roles and responsibilities of professionals in teaching and training and early learning, including demonstrating ethical behavior in educational settings;

(B) describe different types of schools such as academies and Montessori, public, private, charter, and magnet schools and schools in urban and rural areas;

(C) compare teacher salary schedules among different school models such as public, private, and charter schools within rural and urban areas of the state;

(D) discuss factors, including stipends, state and school district initiatives, and level of education, that can impact earning potential; and

(E) identify various sources for information related to education careers such as requirements to become a teacher, curriculum standards, and the structures and roles of state and federal governing bodies in education.

(7) The student experiences authentic education and training opportunities. The student is expected to:

(A) observe educator duties and responsibilities through activities such as assisting, shadowing, or observing;

(B) develop and evaluate instructional materials such as visuals, teacher aids, manipulatives, lessons, and lesson plans;

(C) define lesson plan components, including objectives, direct instruction, guided practice, independent practice, and formative and summative assessments;

(D) identify and discuss methods to adapt lessons to meet student needs; and

(E) identify a personal set of beliefs related to education in preparation for developing a philosophy of education.

(8) The student identifies elements of an effective classroom environment. The student is expected to:

(A) use available classroom equipment and technology for effective instruction;

(B) analyze effective tools used in classroom management such as classroom expectations, seating charts, classroom set-up, procedures and routines, and teacher organization and preparation; and

(C) explain characteristics of an effective learning environment, including universally accessible classroom design.

(9) The student analyzes the education and training requirements for a career in an area of interest. The student is expected to:

(A) investigate degree plans or training alternatives for various occupations within teaching and training and early learning;

(B) develop a graduation plan that leads to a specific career choice in the area of interest;

(C) investigate and identify high school and dual enrollment opportunities related to education and training careers;

(D) investigate and identify scholarships, grants, and financial incentives related to interest areas in education and training;

(E) identify and compare technical and community college programs that align with interest areas in education and training; and

(F) identify and compare university programs and institutions that align with interest areas in education and training.

(10) The student documents technical knowledge and skills related to education and training. The student is expected to:

(A) assemble basic professional portfolio components such as basic resume, samples of work, service-learning logs, assessment results, and mock scholarship applications; and

(B) present a portfolio to interested stakeholders such as teachers, school administrators, career and technical education administrators, curriculum specialists, or human resources personnel.

(11) The student understands how classroom observations (video or in person) inform and improve instruction. The student is expected to:

(A) apply knowledge gained in the course to conduct targeted observations;

(B) record objective observations of student behavior and teacher interactions;

(C) explain how observations can influence philosophy of education and delivery of instruction; and

(D) identify qualities of an effective classroom through classroom observation.

§127.319. *Child Development Associate Foundations (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grade 10 but open for students through Grade 12. Recommended prerequisites: Principles of Education and Training or Principles of Human Services. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) The Child Development Associate Foundations course is a laboratory course addressing the knowledge and skills related to applying Child Development Associate Competency Standards in early childhood environments and understanding how these competencies

help young children move with success from one developmental stage to the next.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student identifies professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate effective written communication;

(B) practice various forms of communication such as verbal and non-verbal communication skills used in education and career settings;

(C) apply decision-making skills;

(D) identify and exhibit characteristics of professionalism; and

(E) develop effective work ethic practices.

(2) The student understands the need for establishing a safe, healthy learning environment for young children. The student is expected to:

(A) describe a safe physical setting for an indoor classroom environment;

(B) describe a safe physical setting for an outdoor play environment;

(C) compare and contrast the learning environments for childcare settings such as preschool, infant-toddler, family childcare, and home visitor environments;

(D) identify practices that promote health and prevent illness in an early childhood classroom; and

(E) identify components of a learning environment that promotes engagement, play, exploration, and learning of all children, including children with special needs.

(3) The student recognizes the importance of advancing each child's physical and intellectual competence in the early childhood classroom through a variety of developmentally appropriate equipment, learning experiences, and teaching strategies. The student is expected to:

(A) analyze the methods for promoting physical development in young children;

(B) investigate strategies for promoting cognitive development in young children;

(C) investigate techniques for promoting language and early literacy in young children, including dual-language learners; and

(D) investigate and explain reasons for promoting creative expression and creative abilities in young children.

(4) The student analyzes social and emotional development in young children. The student is expected to:

(A) summarize the value of developing a warm, positive, supportive, and responsive relationship with each child;

(B) explain the value of helping each child learn about and take pride in the child's individual and cultural identity; and

(C) research and explain the significance of helping each child function effectively in a group setting, express feelings, and acquire social skills.

(5) The student discusses the need for providing positive guidance in an early childhood classroom. The student is expected to:

(A) summarize the importance of a classroom management plan;

(B) explain the importance of positively addressing challenging behaviors; and

(C) compare various positive guidance techniques.

(6) The student describes the benefits of objective observations and assessments of young children in the early childhood classroom. The student is expected to:

(A) investigate and compare various observation tools and strategies;

(B) analyze how observations impact curriculum planning and individualized teaching; and

(C) describe how objective observations are used to build productive relationships with families.

(7) The student examines the importance of positive and productive relationships with families of young children. The student is expected to:

(A) investigate and describe different family structures;

(B) describe ways to establish partnerships with families; and

(C) describe methods for effectively communicating with families.

(8) The student analyzes the components of operating an effective, professional early childhood program. The student is expected to:

(A) discuss the importance of establishing and maintaining professional relationships within an early childhood program;

(B) research various techniques for navigating disagreements or conflicts between personnel of an early childhood program;

(C) investigate the qualities of teaching with intentionality; and

(D) explain the importance of advocating for early childhood education.

(9) The student documents technical knowledge and skills. The student is expected to:

(A) assemble professional portfolio components such as a resume, samples of learning experiences, service-learning log, and assessment results; and

(B) present the portfolio to interested stakeholders such as industry professionals, parents, community members, campus teachers and administrators, and peers.

§127.320. Practicum in Early Learning (Two Credits), Adopted 2021.

(a) General requirements. This course is recommended for students in Grade 12. Prerequisite: Child Guidance. Recommended

prerequisites: Child Development or Child Development Associate Foundations. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Practicum in Early Learning is a field-based course that provides students background knowledge of early childhood development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher facilitator and an exemplary industry professional. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of early learning teachers, trainers, paraprofessionals, or other educational personnel.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate advanced written communication skills;

(B) perform job-appropriate mathematical applications;

(C) demonstrate appropriate forms of communication such as verbal and non-verbal communication used in educational and career settings;

(D) promote and exhibit teamwork skills;

(E) analyze and apply decision-making skills;

(F) implement problem-solving techniques effectively;

(G) analyze and demonstrate conflict-management skills;

(H) assess personal leadership skills;

(I) describe and demonstrate professionalism, including time-management skills; and

(J) analyze and demonstrate effective work ethic practices.

(2) The student explores the early childhood education profession. The student is expected to:

(A) analyze current trends and issues that impact early childhood education such as political, societal, and economic trends and issues;

(B) analyze qualities of effective early childhood education professionals and programs;

(C) develop a written summary of professional beliefs and values about early childhood education, how young children learn, and the role of an early educator;

(D) explore the educational/academic requirements and possible degrees/certifications available in early childhood education;

(E) develop and refine a personal career plan in preparation for a career in the field of early childhood development or education;

(F) explore and identify early childhood development or education opportunities in non-traditional settings such as those in corporations, community outreach programs, nonprofits, and government entities; and

(G) explore educational high-needs and teacher-specialty areas such as special education and bilingual and English as a second language education programs.

(3) The student understands the learner and learning process. The student is expected to:

(A) apply principles and theories of human development appropriate to early learning situations and reflect on the application thereof;

(B) apply principles and theories about the learning process to specific early learning situations and reflect on the application thereof;

(C) analyze the dynamics of educator and student behaviors that facilitate the early learning process;

(D) analyze teaching skills that facilitate the early learning process and document field-learning experiences; and

(E) demonstrate and evaluate effective instructional practices to accommodate diversity such as learning differences, learner exceptionality, and special-needs considerations.

(4) The student plans and implements effective instruction. The student is expected to:

(A) demonstrate and evaluate techniques promoting early childhood growth and development skills such as language, literacy, numeracy, motor learning, and cross-disciplinary content areas;

(B) develop age-appropriate lesson plans and instructional materials that align to student learning goals;

(C) evaluate the effectiveness of lesson plans and instructional strategies; and

(D) explain how learner and professional feedback is used to guide selection and adjustment of instructional strategies.

(5) The student creates and maintains an effective learning environment. The student is expected to:

(A) create and maintain a safe and an effective learning environment;

(B) integrate teacher or trainer practices that promote an effective learning environment;

(C) apply classroom management techniques that promote an effective learning environment; and

(D) demonstrate specific conflict-management and mediation techniques supportive of an effective learning environment.

(6) The student assesses instruction and learning. The student is expected to:

(A) develop and apply formal and informal assessments to track and monitor student learning and progress; and

(B) analyze assessment data to inform and modify instruction.

(7) The student understands the relationship between school, families, and community in early learning. The student is expected to:

(A) select family services and school and community resources to promote student growth;

(B) promote learning and build support through positive school partnership activities with stakeholders such as families, schools, communities, and business/industry; and

(C) collaborate with professional early learning community members to meet the needs of students and families.

(8) The student develops technology skills. The student is expected to:

(A) utilize current technology applications that are age-appropriate for specific student learning needs, including for early learners with special needs; and

(B) integrate the skillful use of technology as a tool for instruction, evaluation, communication, and management.

(9) The student understands the professional, ethical, and legal responsibilities of early childhood professionals. The student is expected to:

(A) demonstrate and evaluate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals;

(B) analyze professional and ethical standards that apply to early childhood professionals; and

(C) analyze situations requiring decisions based on professional, ethical, and legal considerations.

(10) The student explores the need and opportunities for continued professional development for early education professionals. The student is expected to:

(A) identify strategies and resources for the professional development of early education professionals such as research and assessment; and

(B) create a plan for professional career growth, including short-term and long-term goals.

(11) The student understands facility operations, including nutrition, program management, and safety guidelines. The student is expected to:

(A) explain the importance of accurate record maintenance such as personnel, student, incident, and facility documentation;

(B) create a meal plan that promotes good nutrition and wellness;

(C) explain the importance of allocation of facility resources and budget management; and

(D) explain the importance of safety procedures and regulations.

(12) The student continues to participate in field-based experiences in early childhood settings. The student is expected to:

(A) apply instructional strategies and concepts within a local educational or training facility; and

(B) document, assess, and reflect on instructional experiences.

(13) The student documents technical knowledge and skills. The student is expected to:

(A) gather artifacts and documentation that support attainment of technical skill competencies;

(B) update a professional portfolio to include components such as a resume, samples of work, service-learning log, recognitions, awards, scholarship essays, letters of recommendation, certifications, evaluations, and Child Development Associate (CDA) requirements; and

(C) present a portfolio to interested stakeholders.

§127.321. Extended Practicum in Early Learning (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grade 12. Required prerequisite: Child Guidance. Recommended prerequisites: Child Development or Child Development Associate Foundations. Corequisite: Practicum in Early Learning. This course must be taken concurrently with Practicum in Early Learning and may not be taken as a stand-alone course. Students shall be awarded one credit for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Extended Practicum in Early Learning is a field-based internship that provides students background knowledge of early childhood development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher facilitator and an exemplary industry professional. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of early learning teachers, trainers, paraprofessionals, or other educational personnel.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to early childhood education professions;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate professional standards and personal qualities needed to be employable such as leadership, appreciation of diversity, conflict-management, work ethic, and adaptability with increased fluency;

(D) demonstrate technology applications skills such as effective use of social media, email, internet, publishing tools, presentation tools, spreadsheets, or databases with increased fluency to enhance work products; and

(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks.

(2) The student applies professional communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) present information formally and informally;

(C) analyze, interpret, and communicate information;

and
(D) apply active listening skills to obtain and clarify information.

(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.

(4) The student understands the professional, ethical, and legal responsibilities in early childhood education professions. The student is expected to:

(A) demonstrate a positive, productive work ethic by performing assigned tasks as directed;

(B) show integrity by choosing the ethical course of action when making decisions;

(C) demonstrate proper etiquette and knowledge of acceptable-use policies when using networks, especially resources on the internet and intranet; and

(D) comply with all applicable rules, laws, and regulations in a consistent manner.

(5) The student continues to participate in field-based experiences in early childhood education and education and training professions. The student is expected to:

(A) apply instructional strategies and concepts with increased fluency within a local educational or training facility;

(B) apply principles and theories that impact instructional planning;

(C) develop curriculum and related materials to support instruction that aligns with current child development industry standards;

(D) demonstrate competency in foundation and enrichment subject areas;

(E) create lesson plans that meet instructional goals;

(F) document, assess, and reflect on instructional experiences; and

(G) collect representative work samples.

§127.324. Communication and Technology in Education (One Credit). Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Education and Training. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Communication and Technology in Education is an extended course of study designed to provide students with the fundamentals of planning, managing, and training services needed to provide learning support services in Kindergarten-Grade 12 classrooms. Students will develop knowledge and skills regarding the professional, ethical, and legal responsibilities in teaching related to educational technology; students will also understand laws and pedagogical justifications regarding classroom technology use. Students will develop knowledge of developmentally appropriate practice for age level when technology is used by learners. This course provides an opportunity for students to participate in training related to standards set by the International Society for Technology in Education.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate written communication skills;

(B) perform job-appropriate numerical and arithmetic application;

(C) practice various forms of communication such as verbal and non-verbal communication skills used in educational and career settings;

(D) exhibit teamwork skills;

(E) apply decision-making skills;

(F) identify and implement problem-solving techniques;

(G) describe conflict-management skills;

(H) describe and demonstrate professionalism;

(I) describe effective work ethic practices;

(J) demonstrate appreciation for diversity;

(K) participate in training, education, or certification for employment;

(L) demonstrate skills related to seeking and applying for employment; and

(M) create a resume and cover letter to document information such as work experience, licenses, certifications, and work samples.

(2) The student understands the professional, ethical, and legal responsibilities when communicating in the educational field. The student is expected to:

(A) apply communication standards that promote professional, ethical, and legal conduct;

(B) identify times when communication between school and parents/community is necessary;

(C) distinguish between appropriate and inappropriate uses of social media and other communication platforms and methods; and

(D) cite sanctions and consequences for educator misconduct such as those stemming from inappropriate relationships.

(3) The student understands multiple forms of communication necessary for effective teaching. The student is expected to:

(A) demonstrate effective verbal communication skills with various stakeholders such as students, educators, parents/guardians, community members, and other professionals;

(B) demonstrate active listening skills to obtain and clarify information;

(C) identify various forms of digital communication for educators such as email, blogs, wikis, podcasts, vlogs, digital streaming, infographics, digital portfolios, or social media;

(D) construct effective and professional electronic communication with parents and stakeholders such as newsletters, emails, and websites;

(E) demonstrate effective professional collaboration and communication such as participation in professional learning communities, peer-coaching, and mentoring;

(F) demonstrate effective student-teacher communication such as assignment feedback and one-on-one interaction;

(G) facilitate effective student group work and multiple strategies for student engagement; and

(H) differentiate between approaches to communication based on student needs, including considerations for special populations and nonverbal communication.

(4) The student applies digital literacy concepts to communication with students and stakeholders. The student is expected to:

(A) apply digital literacy practices in communications to students and stakeholders such as desktop publishing, elements of art and design, and design thinking;

(B) demonstrate appropriate search strategies for finding resources on the internet such as Boolean searches;

(C) compare various digital media technologies such as digital books, databases, websites, interactive games, and digital videos; and

(D) evaluate and select appropriate software for specific purposes such as communication and research.

(5) The student evaluates technology and applications for classroom use. The student is expected to:

(A) demonstrate understanding of laws regarding classroom technology use such as Family Educational Rights and Privacy Act (FERPA), Children's Online Privacy Protection Act (COPPA), end-user license agreements (EULAs), and age restrictions;

(B) apply laws related to the legal use of electronic materials such as copyright, fair use, public domain, and open source;

(C) evaluate usage of classroom technology using a model such as substitution augmentation modification redefinition (SAMR) and technological pedagogical content knowledge (TPaCK);

(D) describe methods for approval of technology use in the district such as inventorying, licensing, and budgeting; and

(E) identify classroom management strategies appropriate for technology use in the classroom.

(6) The student creates engaging lessons and lesson plans incorporating technology. The student is expected to:

(A) analyze the relationship between technology and student engagement in the classroom;

(B) design learning experiences that incorporate 21st century learning skills such as creativity, collaboration, critical thinking, communication, and resiliency;

(C) create lessons using different types of technology such as presentation software, spreadsheet software, image editing software, video creation software, polling software, and word processing software;

(D) apply technology to assess student learning at the beginning of, during, and at the end of a lesson;

(E) design authentic learning experiences that align with content-area Texas Essential Knowledge and Skills and use technology to maximize active, deep learning across grade levels to show appropriate use based on age;

(F) create an interactive lesson that utilizes appropriate technology; and

(G) create a differentiated lesson that incorporates the appropriate use of technology.

§127.325. Instructional Practices (Two Credits), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Principles of Education and Training, Human Growth and Development, or Child Development. Students shall be awarded two credits for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Instructional Practices is a field-based (practicum) course that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and perform other duties of teachers, trainers, paraprofessionals, or other educational personnel.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by the education profession and other related occupations. The student is expected to:

(A) demonstrate written communication;

(B) perform job-appropriate numerical and arithmetic application;

(C) practice various forms of communication such as verbal and non-verbal communication skills and appropriate uses of social media in educational and career settings;

(D) exhibit teamwork skills;

(E) apply decision-making skills;

(F) implement problem-solving techniques;

(G) acquire conflict-management skills;

(H) develop leadership skills;

(I) demonstrate professionalism to include appropriate attire expected of professionals in educational settings; and

(J) develop effective work ethic practices.

(2) The student identifies strategies that promote health and wellness by balancing the unique challenges of being an educator with personal responsibilities. The student is expected to:

(A) identify signs of personal stress and anxiety;

(B) choose appropriate boundaries for a healthy work-life balance; and

(C) implement strategies to manage health and wellness.

(3) The student explores the teaching and training profession. The student is expected to:

(A) demonstrate an understanding of the historical foundations of education and training in the United States;

(B) determine and implement pedagogical knowledge and skills learned in this course and needed by teaching and training professionals;

(C) identify qualities of effective schools;

(D) discuss non-traditional settings for teaching and training careers such as those in corporations, community outreach programs, nonprofits, and government entities; and

(E) formulate a professional philosophy of education based on a personal set of beliefs.

(4) The student understands the learner and the learning process. The student is expected to:

(A) relate and implement principles and theories of human development to teaching and training situations;

(B) relate and implement principles and theories about the learning process to teaching and training situations;

(C) demonstrate and implement behaviors and skills that facilitate the learning process;

(D) explain the relationship between effective instructional practices and learning differences, learner exceptionality, and learners with special needs;

(E) evaluate backgrounds, strengths, and skills of students when planning instruction; and

(F) demonstrate techniques for developing effective relationships with students that foster mutual respect and rapport and result in effective instruction.

(5) The student interacts effectively in the role of an educator. The student is expected to:

(A) demonstrate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals;

(B) demonstrate methods for promoting stakeholder partnerships in improving educational outcomes; and

(C) describe the procedure for handling and reporting physical or emotional abuse.

(6) The student plans and develops effective instruction. The student is expected to:

(A) explain the role of the Texas Essential Knowledge and Skills in planning and evaluating instruction;

(B) explain the rationale for having a fundamental knowledge of the subject matter in order to plan, prepare, and deliver effective instruction;

(C) explain the rationale for and process of instructional planning components such as vertical alignment and scope and sequence;

(D) describe principles and theories that impact instructional planning;

(E) create clear short-term and long-term learning objectives that are developmentally appropriate for students; and

(F) demonstrate lesson planning to meet instructional goals.

(7) The student creates an effective learning environment. The student is expected to:

(A) describe and implement a safe and an effective learning environment that incorporates the principles of universal design;

(B) analyze and evaluate strategic student grouping techniques that result in effective instruction;

(C) demonstrate teacher and trainer practices that promote an effective learning environment;

(D) evaluate materials and equipment to determine age and grade level appropriateness and to meet the needs of diverse learners;

(E) identify classroom management techniques that promote an effective learning environment; and

(F) demonstrate communication, conflict-management, and mediation techniques supportive of an effective learning environment.

(8) The student assesses teaching and learning. The student is expected to:

(A) describe the role of assessment as part of the learning process;

(B) create assessments to measure student learning;

(C) analyze the assessment process;

(D) use appropriate assessment strategies in an instructional setting; and

(E) use assessment data to evaluate and revise lesson plans.

(9) The student understands the relationship between school and society. The student is expected to:

(A) explain the relationship between school and society;

(B) recognize and use resources for professional growth such as family, school, and community resources; and

(C) collaborate with stakeholders such as family, school, and community to promote learning.

(10) The student develops technology skills. The student is expected to:

(A) describe the role of technology in the instructional process;

(B) use technology applications appropriate for specific subject matter and student needs; and

(C) demonstrate skillful use of technology as a tool for instruction, evaluation, and management.

(11) The student understands the professional, ethical, and legal responsibilities in teaching and training. The student is expected to:

(A) describe teacher and trainer practices that promote professional and ethical conduct;

(B) analyze professional and ethical standards that apply to educators and trainers;

(C) analyze situations requiring decisions based on professional, ethical, and legal considerations; and

(D) analyze expected effects of compliance and non-compliance with the Code of Ethics and Standard Practices for Texas Educators.

(12) The student participates in field-based experiences in education and training. The student is expected to:

(A) apply instructional strategies and concepts within a local educational or training facility; and

(B) document, assess, and reflect on instructional experiences.

(13) The student documents technical knowledge and skills. The student is expected to:

(A) update professional portfolio components such as resume, samples of work, service-learning log, assessment results, and mock scholarship applications; and

(B) present the portfolio to interested stakeholders.

(14) The student demonstrates the knowledge and skills needed to provide meaningful, specific, and timely feedback to students, families, and other school personnel on the growth of students in relation to classroom goals while maintaining student confidentiality. The student is expected to:

(A) explain the role feedback plays in the learning process;

(B) provide guidance and feedback to motivate student behavior and outcomes;

(C) demonstrate methods of providing feedback to students such as checklists, classroom processes, and written documentation;

(D) demonstrate methods of accepting and reflecting on feedback to determine plans for improvement of educational outcomes; and

(E) apply questioning strategies to facilitate student discussion.

(15) The student demonstrates knowledge and understanding of teacher responsibility with regard to accommodations and modifications for students with special needs. The student is expected to:

(A) explain the structure and components of an individualized education program (IEP);

(B) explain the structure and components of a 504 plan; and

(C) compare accommodations and modifications for students with special needs.

(16) The student demonstrates proper record-keeping strategies needed by teachers to demonstrate evidence of student progress. The student is expected to:

(A) understand and demonstrate the use of learning management systems and record-keeping tools;

(B) outline school district policies related to teacher record keeping; and

(C) identify the essential components of behavioral and academic records according to state and school district policy.

(17) The student uses standard observation techniques to observe a variety of educational settings. The student is expected to:

(A) evaluate teaching styles, learning environments, and classroom management utilizing observation checklists or other observation and evaluation tools; and

(B) use observation and evaluation reports to reflect on teaching practices and develop strategies for improvement.

(18) The student assesses the benefits of how a mentor relationship impacts a teaching career. The student is expected to:

(A) recognize the benefits of a mentor relationship such as increased teacher retention, mentor guidance, and coaching; and

(B) seek out and foster mentorship opportunities.

(19) The student analyzes teacher employment requirements and professional growth opportunities for those in the education profession such as required education and certification. The student is expected to:

(A) describe required education needed to become a certified teacher;

(B) explain the steps for becoming a certified teacher in Texas;

(C) compare certification requirements for various content and grade level areas of interest; and

(D) identify various financial aid sources available for teacher candidates such as scholarships, student loans, and student loan forgiveness options once certified.

§127.326. Practicum in Education and Training (Two Credits), Adopted 2021.

(a) General requirements. This course is recommended for students in Grade 12. Prerequisite: Instructional Practices. Recommended prerequisites: Principles of Education and Training, Human Growth and Development, and Child Development. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Practicum in Education and Training is a field-based course that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and perform other duties of classroom teachers, trainers, para-professionals, or other educational personnel.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by teaching and training profession. The student is expected to:

(A) demonstrate advanced written communication skills;

(B) perform job-appropriate numerical and arithmetic application;

(C) demonstrate appropriate forms of communication such as verbal and non-verbal communication used in educational and career settings;

(D) promote and exhibit teamwork skills;

(E) analyze and apply decision-making skills;

(F) implement problem-solving techniques effectively;

(G) analyze and demonstrate conflict-management skills;

(H) assess personal leadership skills in education settings;

(I) describe and demonstrate professionalism; and

(J) analyze and demonstrate effective work ethic practices.

(2) The student analyzes strategies that promote health and wellness to address the unique challenges in balancing work and personal responsibilities for educators. The student is expected to:

(A) examine signs of personal stress and anxiety;

(B) describe and develop appropriate boundaries for a healthy work-life balance; and

(C) identify and implement strategies to manage health and wellness.

(3) The student explores the teaching and training field and profession. The student is expected to:

(A) analyze current trends and issues that impact education such as political, societal, and economic trends and issues;

(B) analyze practices of effective teaching and training professionals;

(C) analyze qualities of effective schools;

(D) develop a written summary of professional beliefs and values about education and training;

(E) determine the educational/academic requirements and possible degrees/certifications necessary for a profession of interest in teaching and training;

(F) refine a personal career plan in preparation for a career in the field of education or training;

(G) research and identify teaching and training opportunities in non-traditional settings such as those in corporations, community outreach programs, nonprofits, and government entities; and

(H) research and identify educational high-needs and teacher-shortage areas.

(4) The student understands the learner and learning process. The student is expected to:

(A) apply principles and theories of human development appropriate to specific teaching or training situations;

(B) apply principles and theories about the learning process to specific teaching or training situations;

(C) analyze the dynamics of educator and student behaviors that facilitate the learning process;

(D) analyze teaching skills that facilitate the learning process; and

(E) demonstrate and evaluate effective instructional practices to accommodate diversity such as learning differences, learner exceptionality, and special needs.

(5) The student interacts effectively in the role of an educator. The student is expected to:

(A) demonstrate and evaluate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals; and

(B) demonstrate and evaluate techniques that promote literacy.

(6) The student plans and uses effective instruction. The student is expected to:

(A) apply principles and theories that impact instructional planning;

(B) use lesson planning tools such as unit plans and scope and sequence and vertical alignment documents;

(C) develop instructional materials that align with the Texas Essential Knowledge and Skills;

(D) demonstrate competency in foundation and enrichment subject areas;

(E) apply research-based practices to create lessons plans that meet instructional goals;

(F) analyze the development of effective instructional strategies;

(G) evaluate and analyze effectiveness of lessons plans and instructional strategies used in a lesson or series of lessons; and

(H) explain how learner and professional feedback is used to guide selection and adjustment of instructional strategies.

(7) The student creates and maintains an effective learning environment. The student is expected to:

(A) apply principles of universal design to create and maintain a safe and effective learning environment;

(B) integrate teacher or trainer practices that promote an effective learning environment;

(C) apply classroom management techniques that promote an effective learning environment; and

(D) demonstrate specific conflict-management and mediation techniques supportive of an effective learning environment.

(8) The student assesses instruction and learning. The student is expected to:

(A) develop and apply formative and summative assessments to foster student learning;

(B) use assessment strategies to promote personal growth and teaching or training improvement;

(C) use self-reflection techniques to promote personal growth and teaching or training improvement; and

(D) use classroom and standardized test assessment data to drive instructional strategy.

(9) The student understands the relationship between school and society. The student is expected to:

(A) identify ways to support learning through advocacy;

(B) identify and select family, school, and community resources that support learning; and

(C) promote learning and build support through positive school partnership activities with stakeholders such as families, schools, communities, and business/industry.

(10) The student develops technology skills. The student is expected to:

(A) access and use current technology applications appropriate for specific subject matter and student needs; and

(B) integrate the use of technology as a tool for instruction, evaluation, and management effectively.

(11) The student understands the professional, ethical, and legal responsibilities in teaching and training. The student is expected to:

(A) analyze teacher and trainer practices that promote professional and ethical conduct;

(B) analyze professional and ethical standards that apply to educators and trainers;

(C) analyze situations requiring decisions based on professional, ethical, and legal considerations; and

(D) analyze potential consequences related to non-compliance with the Code of Ethics and Standard Practices for Texas Educators.

(12) The student explores the need and opportunities for continued professional development for educators and trainers. The student is expected to:

(A) identify strategies and resources for the professional development of educators or trainers such as research and assessment;

(B) demonstrate teacher or trainer practices that promote ongoing professional development and lifelong learning; and

(C) develop a plan for professional growth.

(13) The student participates in field-based experiences in education or training. The student is expected to:

(A) apply instructional strategies and concepts within a local educational or training facility; and

(B) document, assess, and reflect on instructional experiences.

(14) The student documents technical knowledge and skills. The student is expected to:

(A) gather artifacts and documentation that support attainment of technical skill competencies;

(B) update a professional portfolio to include components such as a resume, samples of work, service-learning logs, recognitions, awards, scholarship essays, letters of recommendation, certifications, and evaluations; and

(C) present a professional portfolio to interested stakeholders.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 475-1497



SUBCHAPTER I. HEALTH SCIENCE

19 TAC §§127.416 - 127.433

STATUTORY AUTHORITY. The new sections are proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum required in TEC, §28.002; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; TEC, §28.025(b-2), which requires the SBOE by rule to allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content; and TEC, §28.025(b-17), which requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2) and (b-17).

§127.416. Implementation of Texas Essential Knowledge and Skills for Health Science, Adopted 2021.

(a) The provisions of this subchapter shall be implemented by school districts beginning with the 2022-2023 school year.

(b) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for career and technical education as adopted in §§127.417-127.433 of this subchapter.

(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§127.417-127.433 of this subchapter shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.

(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§127.417-127.433 of this subchapter shall be implemented for the following school year.

§127.417. Medical Terminology (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 9-12. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.

(3) The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

(4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

(5) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to learn the knowledge and skills necessary to pursue a health science career through further education and employment.

(6) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.

(7) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(8) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) express ideas in a clear, concise, and effective manner;

(B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and

(C) exemplify professional work standards such as appearance, attire, time management, organizational skills, and responsibilities.

(2) The student recognizes the terminology related to the health science industry. The student is expected to:

(A) identify abbreviations, acronyms, and symbols related to the health science industry;

(B) recognize the incorrect use of abbreviations, acronyms, and symbols through review of The Joint Commission's "Do Not Use List";

(C) identify and define the component parts of medical words, including root, prefix, suffix, and combining vowels;

(D) practice word-building skills;

(E) research the origins of eponyms;

(F) recall directional terms and anatomical planes related to body structure;

(G) define and accurately spell occupationally specific terms such as those relating to the body systems, surgical and diagnostic procedures, diseases, and treatment; and

(H) use prior knowledge and experiences to understand the meaning of terms as they relate to the health science industry.

(3) The student demonstrates communication skills using the terminology applicable to the health science industry. The student is expected to:

(A) demonstrate appropriate verbal and written strategies such as correct pronunciation of medical terms and spelling in a variety of health science scenarios;

(B) employ increasingly precise language to communicate; and

(C) translate technical material related to the health science industry.

(4) The student examines available resources. The student is expected to:

(A) examine medical and dental dictionaries and multimedia resources;

(B) integrate resources to interpret technical materials; and

(C) investigate electronic and digital media with appropriate supervision.

(5) The student interprets medical abbreviations. The student is expected to:

(A) distinguish medical abbreviations used throughout the health science industry; and

(B) translate medical abbreviations in simulated technical material such as physician progress notes, radiological reports, and laboratory reports.

(6) The student appropriately translates health science industry terms. The student is expected to:

(A) interpret, transcribe, and communicate vocabulary related to the health science industry;

(B) translate medical terms to conversational language to facilitate communication;

(C) distinguish medical terminology associated with medical specialists such as geneticists, pathologists, and oncologists;

(D) summarize observations using medical terminology; and

(E) interpret contents of medical scenarios correctly.

§127.418. Health Informatics (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Medical Terminology. Recommended prerequisites: Principles of Health Science and Business Information Management I. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Health Informatics course is designed to provide knowledge of one of the fastest growing areas in both academic and professional fields. Healthcare information technology has increased demand for information and health professionals who can effectively design, develop, and use technologies such as electronic medical records, patient monitoring systems, and digital libraries. This course will include a focus on billing and coding.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;

(B) demonstrate adaptability skills such as problem solving and critical and creative thinking;

- (C) develop a career plan;
- (D) exhibit teamwork;
- (E) create a job-specific resume; and
- (F) exemplify professional work standards such as appearance, attire, time management, organizational skills, and responsibilities.

(2) The student interprets fundamental knowledge of concepts of health information systems technology and the tools for collecting, storing, and retrieving health care data. The student is expected to:

(A) discuss, define, and differentiate the common health information systems such as electronic medical records and electronic health records, practice management software, master patient index (MPI), patient portals, remote patient monitoring, and clinical decision support; and

(B) explain how various health information systems support the administrative, financial, clinical, and research needs of a health care enterprise.

(3) The student employs the various types of databases in relation to health informatics. The student is expected to:

(A) define the function of a database management system;

(B) identify the purpose of data modeling;

(C) define the customary steps in the data modeling process;

(D) differentiate between entities, attributes, and relationships in a data model; and

(E) explain various types of organizational databases.

(4) The student distinguishes between data and information. The student is expected to:

(A) discuss the importance of data security, accuracy, integrity, reliability, and validity; and

(B) demonstrate an understanding of data information concepts for health information systems, electronic health records, and patient registries.

(5) The student examines the evolution of the health information system. The student is expected to:

(A) evaluate the growing role of the electronic health record;

(B) review the progress of the development of the electronic health record;

(C) explain functional requirements for electronic health records; and

(D) explain the concept and importance of the interoperability of electronic health records and other health information systems.

(6) The student examines the process of medical diagnostic and coding concepts as well as current procedural practices. The student is expected to:

(A) examine Health Insurance Portability and Accountability Act (HIPAA) guidelines for confidentiality, privacy, and security of a patient's information within the medical record;

(B) differentiate between insurance fraud and insurance abuse;

(C) discuss the linkage between current procedural terminology (CPT) codes; International Classification of Diseases, 10th revision, Clinical Modification (ICD-10-CM) codes; and medical necessity for reimbursement for charges billed;

(D) search ICD-10-CM code system for correct diagnosis code using patient information;

(E) identify the two types of codes in the health care common procedure coding system (HCPCS); and

(F) explain how medical coding affects the payment process.

(7) The student identifies agencies involved in the health insurance claims process. The student is expected to:

(A) define fiscal intermediary;

(B) define Medicaid and Medicare;

(C) discuss health care benefit programs such as TRICARE and Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA);

(D) explain how to manage a worker's compensation case;

(E) complete a current health insurance claim form such as the Centers for Medicare and Medicaid Service (CMS-1500) form; and

(F) identify three ways to transmit electronic claims.

§127.419. Healthcare Administration and Management (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Medical Terminology and Business Information Management I. Recommended prerequisite: Principles of Health Science. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) Healthcare Administration and Management is designed to familiarize students with the concepts related to healthcare administration as well as the functions of management, including planning, organizing, staffing, leading, and controlling. Students will also demonstrate interpersonal and project-management skills.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills required by the healthcare industry. The student is expected to:

(A) role play examples of effective written and oral communication in various scenarios such as customer service, marketing, and public relations;

(B) demonstrate collaboration skills through teamwork;

(C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;

(D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;

(E) comply with all applicable rules, laws, and regulations; and

(F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.

(2) The student demonstrates an understanding of the healthcare management concept. The student is expected to:

(A) define the term healthcare management;

(B) explain the roles and responsibilities of healthcare professionals, including the management functions of planning, organizing, staffing, leading, and controlling;

(C) explain how organizational behavior and teamwork in healthcare impact patient outcomes and effective day-to-day operations;

(D) explore and discuss the factors that influence healthcare management such as governmental regulations, payment models, employee turnover, and workforce shortages;

(E) define ethical workplace behavior and role play how to make ethical decisions; and

(F) explain how socially responsible management policies such as health equity, inclusion, and diversity policies are initiated and implemented.

(3) The student recognizes the business functions of healthcare systems. The student is expected to:

(A) differentiate among the major healthcare delivery systems such as hospitals, outpatient care facilities, community-based organizations, insurance companies, and pharmaceutical companies;

(B) define and discuss healthcare quality and quality improvement;

(C) specify various types of health information technology and discuss barriers to health information technology adoption;

(D) investigate healthcare financing models;

(E) explain the difference between and provide examples of healthcare revenues and healthcare expenses;

(F) define revenue-cycle management; and

(G) describe the roles of customer service and marketing in health care.

(4) The student evaluates ethical behavioral standards and legal responsibilities. The student is expected to:

(A) research and describe the role of professional associations and regulatory agencies;

(B) examine legal and ethical behavior standards such as Patient Bill of Rights, Advanced Directives, and the Health Insurance Portability and Accountability Act (HIPAA);

(C) investigate the legal and ethical ramifications of unacceptable behavior;

(D) identify examples of conflicts of interest; and

(E) differentiate between the concepts of fraud, waste, and abuse.

§127.420. World Health and Emerging Technologies (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and Principles of Health Science. Recommended prerequisite: Medical Terminology. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The World Health and Emerging Technologies course is designed to examine major world health problems and emerging technologies as solutions to these medical concerns. It is designed to improve students' understanding of cultural, infrastructural, political, educational, and technological constraints and inspire ideas for appropriate technological solutions to global medical care issues.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;

(B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and

(C) exemplify professional work standards such as appearance, attire, time management, organizational skills, and responsibilities.

(2) The student explores and discusses current major human health problems in the world. The student is expected to:

(A) describe the pathophysiology of the three leading causes of death in developing and developed countries;

(B) discuss history of diseases and the evolution of medical technology over time;

(C) contrast health problems in developing and developed countries;

(D) compare the functions of public health organizations at the local; state; national, including the Centers for Disease Control and Prevention (CDC); and international, including the World Health Organization (WHO), levels;

(E) define and calculate incidence, morbidity, and mortality;

(F) identify and describe the challenges in global health that can have the greatest impact on health in developing nations; and

(G) investigate various social determinants of health such as food insecurity, homelessness, or financial insecurities.

(3) The student explains who pays for health care in the world today. The student is expected to:

(A) compare the availability of health care in developing and developed countries;

(B) discuss and contrast the four basic healthcare system models, including the Beveridge Model, Bismarck Model, National Health Insurance Model, and the Out-of-Pocket Model, and compare these models to existing payment mechanisms in the United States of America;

(C) explain how countries that have different healthcare systems such as Canada, the United Kingdom, Japan, Germany, Taiwan, Switzerland, and the United States of America pay for health care and compare their patient outcomes such as infant mortality rates, rate of cancer, or rate of heart disease;

(D) describe how healthcare expenditures have changed over time; and

(E) identify the major contributors to the rising healthcare industry costs.

(4) The student describes the engineering technologies developed to address clinical needs. The student is expected to:

(A) describe technologies that support the prevention and treatment of infectious diseases;

(B) explain the implication of vaccines on the immune system and on public health;

(C) discuss the dangers of antibiotic overuse and misuse;

(D) investigate technologies such as genetics and molecular diagnostics used for the early detection and treatments of several types of cancers;

(E) describe and discuss the technologies used in the diagnosis and treatment of heart disease;

(F) describe and discuss technologies developed to support vital organ failure; and

(G) investigate emerging digital technology such as telehealth and remote monitoring and its impact on healthcare delivery.

(5) The student explores how human clinical trials are designed, conducted, and evaluated. The student is expected to:

(A) describe and discuss types of clinical trials, including the role of the institutional review board;

(B) define and calculate a sample size;

(C) identify quantitative and qualitative methods used in clinical trials; and

(D) compare and contrast different phases of pharmaceutical trials.

(6) The student recognizes the ethical and legal aspects involved in clinical research. The student is expected to identify issues and explain the ethical and legal guidelines for the conduct of research involving human subjects, including informed consent and patient confidentiality.

(7) The student explains how research guides the development of new medical technologies. The student is expected to:

(A) describe how health science research is funded;

(B) explain the role of the U.S. Food and Drug Administration in approving new drugs and medical devices; and

(C) analyze factors that affect the dissemination of new medical technologies.

(8) The student applies research principles to create a project that addresses a major health topic. The student is expected to:

(A) facilitate data analysis and communicate experimental results clearly by effectively using technology such as creating visual aids; and

(B) present the project to classmates, health professionals, parents, or instructors.

§127.421. Medical Billing and Coding (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Medical Terminology. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) Medical Billing and Coding familiarizes students with the process, language, medical procedure codes, requirements of Health Insurance Portability and Accountability Act (HIPAA), and skills they will need to make accurate records. Students will develop an understanding of the entire process of the revenue cycle and how to effectively manage it. The program is designed to prepare students for employment in a variety of health care settings as entry level coder, medical billing specialist, and patient access representative.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills required by the healthcare industry. The student is expected to:

(A) demonstrate the ability to communicate and use interpersonal skills effectively;

(B) compose written communication, including emails using correct spelling, grammar, formatting, and confidentiality;

(C) use appropriate medical terminology and abbreviations; and

(D) model courtesy and respect for patients and team members in the multi-disciplinary healthcare setting and maintain good interpersonal relationships.

(2) The student explores career opportunities in revenue cycle management. The student is expected to:

(A) identify professional opportunities within the medical billing and revenue cycle management professions;

(B) demonstrate ethical billing and coding practices as outlined by professional associations guidelines; and

(C) investigate professional associations applicable to the field of health informatics such as American Academy of Professional Coders (AAPC), American Health Information Management Association (AHIMA), Healthcare Billing and Management Association (HBMA), and American Association of Healthcare Administrative Management (AAHAM).

(3) The student explains the ethical and legal responsibilities of personnel in medical billing and coding. The student is expected to:

(A) identify major administrative agencies that affect billing and coding such as Centers for Medicare and Medicaid Services (CMS) and the Office of the Inspector General (OIG);

(B) identify major laws and regulations that impact health information, including HIPAA, the Stark Law, the Fair Debt Collection Practices Act, and the False Claims Act;

(C) analyze legal and ethical issues related to medical billing and coding, revenue cycle management, and documentation within the medical record;

(D) research compliance laws;

(E) identify appropriate documentation required for the release of patient information;

(F) differentiate between informed and implied consent;

(G) compare and contrast use of information and disclosure or information; and

(H) evaluate cases for insurance fraud and abuse.

(4) The student identifies the body systems to support proficiency in billing and coding. The student is expected to:

(A) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) and Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems and how they apply to medical billing and coding, including:

(i) the integumentary system;

(ii) the skeletal system;

(iii) the muscular system;

(iv) the cardiovascular system;

(v) the respiratory system;

(vi) the digestive system;

(vii) the endocrine system;

(viii) the urinary system;

(ix) the reproductive system; and

(x) the nervous system and special senses; and

(B) identify mental, behavioral, and neurodevelopmental disorders and how they apply to medical billing and coding.

(5) The student demonstrates proficiency in the use of the ICD-10-CM, CPT, and Healthcare Common Procedure Coding System (HCPCS) coding systems. The student is expected to:

(A) apply coding conventions and guidelines for appropriate charge capture;

(B) describe the process to update coding resources;

(C) assign and verify diagnosis and procedure codes to the highest level of specificity, and, as applicable, HCPCS level II codes and modifiers in accordance with official guidelines;

(D) describe the concepts of disease groupings and procedure-code bundling; and

(E) identify coding compliance, including medical necessity.

(6) The student understands revenue cycle management. The student is expected to:

(A) define revenue cycle management;

(B) differentiate between various types of employer-sponsored and government-sponsored insurance models, including health maintenance organization (HMO), preferred-provider organization (PPO), Medicare, Medicaid, TRICARE, high deductible health plans, and workers' compensation;

(C) define Medicare Administrative Contractors (MACs) and investigate the administrative services provided by the MAC for Texas;

(D) describe the patient scheduling and check-in process, including verifying insurance eligibility, obtaining pre-authorization, and processing appropriate patient authorization and referral forms;

(E) describe the sections of the CMS-1500 form to prepare and submit mock clean claims electronically or manually;

(F) differentiate between primary and secondary insurance plans to initially process crossover claims;

(G) interpret remittance advice to determine financial responsibility of insurance company and patient, including a cash-paying patient;

(H) analyze reason for insurance company denials or rejections and determine corrections or appeals required; and

(I) analyze an aging report and how it relates to the revenue cycle.

§127.422. Health Science Theory (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and one

credit from a level one course or level two course within a health science program of study. Recommended prerequisite: Medical Terminology. Recommended corequisite: Health Science Clinical. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.

(4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

(5) The health science industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students should identify the employment opportunities, technology, and safety requirements of each system. Students are expected to learn the knowledge and skills necessary to pursue a health science career through further education and employment.

(6) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.

(7) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(8) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) express ideas in a clear, concise, and effective manner;

(B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and

(C) model industry expectations of professional conduct such as attendance, punctuality, appropriate professional dress, proper hygiene, and time management.

(2) The student demonstrates patient-centered skills and interactions that foster trust and lead to a quality customer service experience. The student is expected to:

(A) demonstrate care, empathy, and compassion;

(B) communicate medical information accurately and efficiently in language that patients can understand; and

(C) comply with Health Insurance Portability and Accountability Act (HIPAA) policy standards.

(3) The student applies mathematics, science, English language arts, and social studies in health science. The student is expected to:

(A) solve mathematical calculations appropriate to situations in a healthcare-related environment;

(B) express ideas clearly in writing and develop skills in documentation related to health science;

(C) interpret complex technical material related to the health science industry;

(D) summarize biological and chemical processes in the body such as maintaining homeostasis; and

(E) research topics related to health science such as the global impact of disease prevention.

(4) The student demonstrates verbal, non-verbal, and electronic communication skills. The student is expected to:

(A) demonstrate therapeutic communication appropriate to the situation;

(B) use appropriate verbal and non-verbal skills when communicating with persons with sensory loss and language barriers in a simulated setting; and

(C) use electronic communication devices in the classroom or clinical setting appropriately.

(5) The student analyzes and evaluates communication skills for maintaining healthy relationships in the healthcare workplace. The student is expected to:

(A) evaluate how healthy relationships influence career performance;

(B) identify the role of communication skills in building and maintaining healthy relationships;

(C) demonstrate strategies for communicating needs, wants, and emotions in a healthcare setting; and

(D) evaluate the effectiveness of conflict-resolution techniques in various simulated healthcare workplace situations.

(6) The student documents and records medical information into a permanent health record. The student is expected to:

(A) research document formats such as dental or medical records;

(B) prepare health documents or records according to industry-based standards; and

(C) record health information on paper and electronic formats such as patient history, vital statistics, and test results.

(7) The student describes industry requirements necessary for employment in health science occupations. The student is expected to:

(A) research education, certification, licensing, and continuing education requirements and salary related to specific health science careers; and

(B) practice employment procedures for a specific health science career such as resume building, application completion, and interviewing.

(8) The student identifies problems and participates in the decision-making process. The student is expected to:

(A) apply critical-thinking, adaptability, and consensus-building skills to solve problems relevant to health science;

(B) evaluate the impact of decisions in health science;
and

(C) suggest modifications to a decision or plan based on healthcare outcomes.

(9) The student demonstrates comprehension and proficiency of clinical skills used by health science professionals in a classroom or clinical setting. The student is expected to:

(A) comply with specific industry standards related to safety requirements;

(B) employ medical vocabulary specific to the healthcare setting;

(C) perform admission, discharge, and transfer functions in a simulated setting;

(D) demonstrate skills related to assisting patients with activities of daily living such as dressing, undressing, grooming, bathing, and feeding;

(E) determine proper equipment needed for patient ambulation such as gait belts, wheelchairs, crutches, or walkers;

(F) demonstrate skills related to assessing range of motion and assisting with mobility, including positioning, turning, lifting, and transferring patients for treatment or examination;

(G) role play techniques used in stressful situations such as situations involving trauma and chronic and terminal illness;

(H) demonstrate first aid, vital signs, cardiopulmonary resuscitation, and automated external defibrillator skills; and

(I) identify basic skills specific to a health science profession such as medical assistant, dental assistant, emergency medical technician-basic, phlebotomy technician, and pharmacy technician.

(10) The student evaluates ethical behavioral standards and legal responsibilities of a health science professional. The student is expected to:

(A) research and describe the role of professional associations and regulatory agencies;

(B) examine legal and ethical behavior standards such as Patient Bill of Rights, advanced directives, and HIPAA; and

(C) investigate the legal, ethical, and professional ramifications of unacceptable or discriminatory behavior.

(11) The student exhibits the leadership skills necessary to function in a healthcare setting. The student is expected to:

(A) identify essential leadership skills of health science professionals;

(B) assess group dynamics in real or simulated groups;
and

(C) integrate consensus-building techniques.

(12) The student maintains a safe work environment. The student is expected to:

(A) describe governmental regulations and guidelines from entities such as the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), The Joint Commission, and the National Institute of Health (NIH);

(B) explain protocols related to hazardous materials and situations such as personal protective equipment (PPE) and blood borne pathogen exposure;

(C) describe how to assess and report unsafe conditions;

(D) identify the benefits of recycling and waste management for cost containment and environmental protection; and

(E) demonstrate proper body mechanics to reduce the risk of injury.

(13) The student assesses wellness strategies for the prevention of disease. The student is expected to:

(A) research wellness strategies for the prevention of disease;

(B) evaluate positive and negative effects of relationships on physical and emotional health;

(C) explain the benefits of positive relationships between community members and health professionals in promoting a healthy community;

(D) research and analyze the effects of access to quality health care;

(E) research alternative health practices and therapies;
and

(F) explain the changes in structure and function of the body due to trauma and disease.

§127.423. *Anatomy and Physiology (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: one credit in biology and one additional credit of high school science. Recommended prerequisite: a course from the Health Science Career Cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Anatomy and Physiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge gener-

ated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) Employability skills. The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;

(B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and

(C) investigate necessary skills for health careers related to anatomy and physiology.

(2) Scientific and engineering practices. The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as lab notebooks or journals, calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, meter sticks, electronic balances, micro pipettors, hand lenses, Celsius thermometers, hot plates, timing devices, Petri dishes, agar, lab incubators, dissection equipment, models, diagrams, or samples of biological specimens or structures, reflex hammers, pulse oximeters, stethoscope, otoscope, sphygmomanometers, pen lights, and ultrasound equipment;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish among scientific hypotheses, theories, and laws.

(3) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) Scientific and engineering practices. The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing, so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) or health science field in order to investigate careers.

(6) Human body organization. The student demonstrates an understanding of the anatomic and physiological basis of life and the ability to explain the interdependence of structure and function in biological systems. The student is expected to:

(A) distinguish between the six levels of structural organization in the human body, including chemical, cellular, tissue, organ, system, and organism, and explain their interdependence;

(B) identify and use appropriate directional terminology when referring to the human body, including directional terms, planes, body cavities, and body quadrants;

(C) identify and describe the major characteristics of living organisms, including response to stimuli, growth and development, homeostasis, cellular composition, metabolism, reproduction, and the ability to adapt to the environment;

(D) research and describe negative and positive feedback loops as they apply to homeostasis; and

(E) research and identify the effects of the failure to maintain homeostasis as it relates to common diseases in each of the body systems.

(7) Histology. The student demonstrates the ability to analyze the structure and function of eukaryotic cells in relation to the formation of tissue. The student is expected to:

(A) define tissue and identify the four primary tissue types, their subdivisions, and functions;

(B) compare epithelial tissue and connective tissue in terms of cell arrangement and interstitial materials;

(C) describe the process of tissue repair involved in the normal healing of a superficial wound; and

(D) describe the general metabolic pathways of carbohydrates, lipids, and proteins.

(8) Skeletal system. The student analyzes the relationships between the anatomical structures and physiological functions of the skeletal system. The student is expected to:

(A) identify and differentiate between the axial skeleton and appendicular skeleton;

(B) identify the types of joints, including gliding, hinge, pivot, saddle, and ball and socket, and describe the movements of each;

(C) identify and locate the anatomy of spongy and compact bone, including epiphysis, diaphysis, medullary cavity, periosteum, bone marrow, and endosteum;

(D) explain the major physiological functions of the skeletal system;

(E) describe the role of osteoblasts, osteocytes, and osteoclasts in bone growth and repair;

(F) identify and describe the different types of fractures such as compound, complete, simple, spiral, greenstick, hairline, transverse, and comminuted; and

(G) identify and describe common diseases and disorders of the skeletal system such as scoliosis, osteoporosis, and bone cancer.

(9) Integumentary system. The student analyzes the relationships between the anatomical structures and physiological functions of the integumentary system. The student is expected to:

(A) identify and describe the structures of the integumentary system, including layers of the skin, accessory organs within each layer, and glandular components in each layer;

(B) describe the factors that can contribute to skin color;

(C) describe and explain the process of tissue repair and scar formation; and

(D) identify and describe common diseases and disorders of the integumentary system such as skin cancer and psoriasis.

(10) Muscular system. The student analyzes the relationships between the anatomical structures and physiological functions of the muscular system. The student is expected to:

(A) explain the major physiological functions of the muscular system, including voluntary movement, involuntary movement, heat production, and maintaining posture;

(B) explain the coordination of muscles, bones, and joints that allows movement of the body, including the methods of attachment of ligaments and tendons;

(C) examine common characteristics of muscle tissue, including excitability, contractibility, extensibility, and elasticity;

(D) identify and describe the appearance, innervation, and function of the three muscle types, including cardiac, skeletal, and smooth;

(E) examine the microscopic anatomy of a muscle fiber, including sarcomere, actin, and myosin;

(F) describe the mechanisms of muscle contraction at the neuromuscular junction;

(G) name, locate, and describe the action of major voluntary muscles in regions of the body, including the head and neck, trunk, upper extremity, and lower extremity;

(H) identify and describe common diseases and disorders of the muscular system such as muscle strains and muscular dystrophy; and

(I) analyze and describe the effects of pressure, movement, torque, tension, and elasticity on the human body.

(11) Nervous system. The student analyzes the relationship between the anatomical structures and physiological functions of the nervous system. The student is expected to:

(A) summarize and distinguish the major physiological functions of the nervous system, including sensation, integration, and motor response;

(B) identify the senses and explain their relationship to nervous system;

(C) investigate and explain the interdependence between the cranial and spinal nerves with the special senses of vision, hearing, smell, and taste;

(D) describe the anatomy of the structures associated with the senses, including vision, hearing, smell, taste, and touch;

(E) identify the anatomical and physiological divisions of the peripheral nervous system and central nervous system;

(F) explain the glial cells within the central nervous system and peripheral nervous system and their associated functions;

(G) analyze the functional and structural differences between gray and white matter relative to neurons;

(H) distinguish between the types of neurons and explain the initiation of a nerve impulse during resting and action potential;

(I) categorize the major neurotransmitters by chemical and physical mechanisms; and

(J) identify and describe common diseases and disorders of the nervous system such as epilepsy, neuralgia, Parkinson's disease, and Alzheimer's disease.

(12) Endocrine system. The student analyzes the relationships between the anatomical structures and physiological functions of the endocrine system. The student is expected to:

(A) identify and locate the nine glands associated with the endocrine system, including the ovaries, testes, pineal gland, pituitary gland, thyroid gland, parathyroid glands, thymus, pancreas, and adrenal glands;

(B) compare and contrast endocrine and exocrine glands and identify the glands associated with each;

(C) describe the hormones associated with each endocrine gland;

(D) research the impact of the endocrine systems on homeostatic mechanisms and other body systems such as the integration between the hypothalamus and the pituitary gland;

(E) explain how the endocrine glands are regulated, including neural, hormonal, and humoral control; and

(F) identify and describe common diseases and disorders of the endocrine system such as hypothyroidism, pancreatic cancer, and diabetes.

(13) Urinary system. The student analyzes the relationships between the anatomical structures and physiological functions of the urinary system. The student is expected to:

(A) identify and describe the anatomical structures and functions of the urinary system, including the kidney, ureters, bladder, and urethra;

(B) compare and contrast the anatomical structures and describe the functions of the male and female urinary system;

(C) summarize and illustrate the structures, functions, and types of nephrons;

(D) examine the methods of fluid balance and homeostasis in the urinary system, including fluid intake and output;

(E) analyze the composition of urine and the process of urine formation, including filtration, reabsorption, and secretion;

(F) describe the relationship between the nervous system, renal system, and muscular system before and during micturition; and

(G) identify and describe common diseases and disorders of the urinary system such as chronic kidney disease, kidney stones, urinary tract infections, and renal cancer.

(14) Cardiovascular system. The student analyzes the relationships between the anatomical structures and physiological functions of the cardiovascular system. The student is expected to:

(A) identify the major functions of the cardiovascular system, including transport, maintaining homeostasis, and immune response;

(B) compare and contrast the anatomical structure of arteries, arterioles, capillaries, venules, and veins;

(C) investigate and illustrate how systemic circulation transports blood, gasses, and nutrients from the heart to the internal and external anatomy of the heart, including tissue layers, chambers, valves, and coronary vessels;

(D) describe the relationship between blood flow and blood pressure, including systolic and diastolic pressure, pulse pressure, and mean arterial pressure;

(E) compare and contrast coronary, pulmonary, and systemic circulation, and describe the major vessels of each;

(F) illustrate how the PQRST waves of an electrocardiogram (EKG) demonstrate the conduction of electricity through the structures of the heart;

(G) describe the relationship between the cardiovascular system, nervous system, and muscular system in regulating cardiac output; and

(H) identify and describe common diseases and disorders of the cardiovascular system such as heart disease, myocardial infarction, ischemia, and hypertrophic cardiomyopathy.

(15) Lymphatic system. The student analyzes the relationships between the anatomical structures and physiological functions of the lymphatic system and understands the immune response. The student is expected to:

(A) evaluate the interaction of the lymphatic system with other body systems such as the circulatory system;

(B) describe the structure and function of the lymphatic organs and explain how lymph moves through the body;

(C) identify and describe the role and function of the immune cells, including T cells and B cells, within the lymphatic system structures;

(D) identify and determine antigens associated with ABO blood typing, including Rhesus (Rh) factor;

(E) summarize the ways the body protects and defends against disease, including inflammation, barrier defenses, and active and passive immunity;

(F) describe the role of antigens and antibodies in the immune response; and

(G) identify and describe common diseases and disorders associated with the lymphatic and immune systems such as inherited or acquired immunodeficiencies, autoimmune diseases, and lymphomas.

(16) Digestive system. The student analyzes the relationships between the anatomical structures and physiological functions of the digestive system. The student is expected to:

(A) examine the anatomical structures and function of the alimentary canal and accessory organs;

(B) compare and contrast mechanical and chemical digestive processes;

(C) evaluate the modes by which energy is processed and stored within the body, including ingestion, propulsion, absorption, and elimination; and

(D) identify and describe common diseases and disorders of the digestive system such as gallstones, Crohn's disease, irritable bowel syndrome, and gastroesophageal reflux disorder.

(17) Respiratory system. The student analyzes the relationships between the anatomical structures and physiological functions of the respiratory system. The student is expected to:

(A) identify and sequence the anatomical structures and functions of the respiratory system;

(B) compare and contrast the functions of upper and lower respiratory tract;

(C) describe the physiology of respiration, including internal and external respiration and gas exchange;

(D) describe the relationship between the respiratory and cardiovascular systems during pulmonary circulation;

(E) investigate factors that affect respiration, including exercise and environmental changes such as altitude; and

(F) identify and describe common diseases of the respiratory system such as asthma, emphysema, pneumonia, viruses, and allergies.

(18) Reproductive system. The student analyzes the relationships between the anatomical structures and physiological functions of the reproductive system. The student is expected to:

(A) explain embryological development of cells, tissues, organs, and systems;

(B) describe and examine the location, structure, and functions of the internal and external female and male reproductive organs and accessory glands;

(C) describe and compare the process of oogenesis and spermatogenesis;

(D) research and discuss the physiological effects of hormones on the stages of the menstrual cycle;

(E) identify and distinguish the hormones involved in maturation and development throughout the life cycle, including puberty, gestation, and menopause; and

(F) identify and describe common diseases and disorders of the reproductive system such as sexually transmitted diseases and cancers of the female and male reproductive systems.

(19) Emerging technologies. The student identifies emerging technological advances in science and healthcare treatment and delivery. The student is expected to:

(A) research and discuss advances in science and medicine at the organ and tissue level such as bionics and wearable monitoring technologies; and

(B) research and describe advances in science and medicine at the cellular level such as stem cells and gene therapy.

§127.424. Pathophysiology (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: Anatomy and Physiology. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Pathophysiology course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Pathophysiology will study disease processes and how humans are affected. Emphasis is placed on prevention and treatment of disease.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner; and

(B) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micro pipettors, hand lenses, Celsius thermometers, hot plates, timing devices, Petri dishes, lab incubators, biochemical media and stains dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using lab notebooks or journals, lab reports, labeled drawings, graphic organizers, peer reviewed medical journals, summaries, oral reports, and technology-based reports;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) or health science field in order to investigate careers.

(6) The student analyzes the mechanisms of pathology. The student is expected to:

(A) describe abnormal biological and chemical processes at the cellular level;

(B) examine and analyze changes resulting from mutations and neoplasms by examining cells, tissues, organs, and systems;

(C) investigate factors that contribute to disease, including age, gender, environment, lifestyle, and heredity; and

(D) analyze and describe how the body's compensating mechanisms attempt to maintain homeostasis when changes occur.

(7) The student examines the process of pathogenesis. The student is expected to:

(A) differentiate and identify pathogenic organisms using microbiological techniques such as gram staining, biochemical identification, and microscopic observation;

(B) research and summarize the stages of pathogenesis, including incubation period, prodromal period, and exacerbation or remission;

(C) analyze the body's natural defense systems against infection, including barriers, the inflammatory response, and the immune response;

(D) analyze other mechanisms of disease prevention and treatment such as vaccinations, antibiotics, chemotherapy, and immunotherapy; and

(E) evaluate the effects of chemical agents, environmental pollution, and trauma on the disease process.

(8) The student examines diseases throughout the body's systems. The student is expected to:

(A) investigate the etiology, signs and symptoms, diagnosis, prognosis, and treatment of diseases;

(B) explore and describe advanced technologies for the diagnosis and treatment of disease;

(C) research and describe reemergence of diseases such as malaria, tuberculosis, polio, and measles;

(D) research and differentiate between the causes, prevention, and impact of nosocomial infections versus community-acquired infections;

(E) research and describe antibiotic-resistant diseases such as methicillin-resistant *Staphylococcus aureus*;

(F) differentiate between various types of diseases and disorders, including hereditary, infectious, and auto-immune; and

(G) investigate ways diseases such as diabetes, Parkinson's, lupus, and congestive heart failure affect multiple body systems.

(9) The student integrates the effects of disease prevention and control. The student is expected to:

(A) evaluate public health issues related to asepsis, isolation, immunization, and quarantine;

(B) analyze the effects of stress and aging on the body;

(C) analyze patient medical data and interpret medical laboratory test results to inform diagnosis and treatment;

(D) analyze and interpret epidemiological data to determine common trends and predict outcomes in disease progression;

(E) research and summarize diseases that threaten world health and propose intervention strategies; and

(F) develop a prevention plan that considers how behaviors contribute to lifestyle diseases.

§127.425. Pharmacy I (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10 and 11. Recommended prerequisites: Introduction to Pharmacy Science or Principles of Health Science and one credit in biology. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The goal of Pharmacy I is for the student to gain a strong foundation in the knowledge and skills needed to pursue a career in the pharmaceutical field (e.g., pharmacy technician, pharmacist). Knowledge includes pharmacology, pharmacy law, medication safety, the dispensing process, and inventory. Pharmacy I is designed to be the second course in a pathway leading to college and career readiness in the healthcare therapeutics professions. The course content aligns with the competencies of pharmacy technician certification examinations.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student exhibits personal and interpersonal knowledge and skills. The student is expected to:

(A) model ethical conduct in complex situations;

(B) model a respectful and professional attitude when interacting with diverse patient populations, colleagues, and professionals;

(C) apply self-management skills such as stress and change management;

(D) apply interpersonal skills, including negotiation skills, conflict resolution, customer service, and teamwork;

(E) practice problem-solving skills in respect to complex ethical decision making; and

(F) compare unethical and illegal conduct in the workplace.

(2) The student communicates effectively with diverse populations. The student is expected to:

(A) practice a respectful and professional attitude when interacting with diverse patient populations, colleagues, and professionals; and

(B) compare communication techniques that are effective for various population clients such as terminally ill, intellectually disabled, visually/hearing impaired, and elderly/pediatric populations.

(3) The student interprets pharmacy correspondence utilizing medical abbreviations and terminology typically found in the pharmacy setting. The student is expected to:

(A) employ pharmacy terminology and abbreviations in creating and utilizing correspondence in the pharmacy such as prescriptions, medication administration records (MARs), and patient order sheets;

(B) compare terminology typically used in the community and institutional pharmacy settings; and

(C) translate sig codes and abbreviations used in the pharmacy.

(4) The student distinguishes between the requirements of various federal agencies. The student is expected to:

(A) explain the handling and disposal of non-hazardous, hazardous, and pharmaceutical substances and waste;

(B) discuss the requirements for controlled substance prescriptions, including new, refill, and transfer prescriptions, according to the Drug Enforcement Administration (DEA) controlled substances schedules;

(C) describe Food and Drug Administration (FDA) recall requirements based on classification for medications, devices, supplies, and supplements;

(D) interpret and apply state and federal laws pertaining to processing, handling, and dispensing of medications, including controlled substances;

(E) interpret state and federal laws and regulations pertaining to pharmacy technicians; and

(F) explain pharmacy compliance with professional standards and relevant legal, regulatory, formulary, contractual, and safety requirements.

(5) The student recalls drug information. The student is expected to:

(A) identify brand name, generic name, classification, and indication of use for common medications with automaticity;

(B) discuss common and life-threatening drug interactions and contraindications;

(C) identify narrow therapeutic index (NTI) medications; and

(D) access and use references such as United States Pharmacopeia (USP) standards, drug reference books, and clinical information sources as needed to perform job duties.

(6) The student explains the dispensing process. The student is expected to:

(A) identify a prescription or medication order for completeness, including drug strength, dosage form, directions, quantity, and refills, and obtain missing information if needed;

(B) communicate with patients to obtain information, including demographics, medication history, health conditions, allergies, and insurance, for the patient profile;

(C) practice assisting pharmacists in collecting, organizing, and recording demographic and clinical information for the *Pharmacists' Patient Care Process*;

(D) perform the necessary mathematical calculations required for order entry, including formulas, ratios, concentrations, percent strength, dilutions, proportions, and allegations;

(E) identify equipment and supplies, including diabetic supplies, spacers, and oral/injectable syringes, required for drug administration based on the package size and unit dose;

(F) identify and describe the importance of lot numbers, expiration dates, and National Drug Codes (NDC) on drug packaging;

(G) practice and adhere to effective infection control procedures;

(H) apply appropriate cleaning standards, including hand washing and cleaning counting trays, countertops, and equipment; and

(I) explain the state pharmacy boards' roles in the regulation of pharmacy technicians and that differences exist between states in the processing, handling, and dispensing of prescription medications.

(7) The student identifies common medication errors and explains error prevention strategies. The student is expected to:

(A) identify high-alert/risk and look-alike/sound-alike (LASA) medications;

(B) describe error prevention strategies, including using Tall Man lettering, trailing/leading zeros, and barcodes; separating inventory; and limiting use of error-prone abbreviations;

(C) describe types of prescription errors, including abnormal doses, early refill, incorrect quantity, incorrect patient, and incorrect drug;

(D) explain pharmacy professional standards for and the role of the pharmacy technician in the patient care process;

(E) identify opportunities to assist pharmacists in the identification of patients who desire or require counseling to optimize the use of medications, equipment, and devices;

(F) discuss the pharmacy technician's role in patient and medication safety practices such as how to calculate dosage of pediatric over-the-counter drugs;

(G) explain how pharmacy technicians assist pharmacists in responding safely and legally to emergent patient situations; and

(H) explain basic safety and emergency preparedness procedures applicable to pharmacy services.

(8) The student performs inventory procedures according to federal, state, local, and facility guidelines. The student is expected to:

(A) identify proper storage for medications in regard to temperature, light sensitivity, product demand, fast movers, cost, and restricted access;

(B) explain the definition and purpose of a formulary or approved/preferred product list;

(C) describe procedures for inventory control, including removal of expired/recalled drug products, rotating inventory, performing a physical inventory, ordering medications/supplies, monitoring periodic automatic replenishment (PAR) levels, and using just-in-time ordering;

(D) explain accepted procedures in purchasing pharmaceuticals, devices, and supplies; and

(E) explain accepted procedures for identifying and disposing of expired medications.

§127.426. Pharmacy II (Two Credits), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: Algebra I, Introduction to Pharmacy Science, and Pharmacy I. Students shall be awarded two credits for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Pharmacy II course provides students with the advanced knowledge and skills to explore various careers in the pharmacy field, including pharmacology, pharmacy law, medication errors, inventory pharmacy calculations, compounding, and workflow expectations in a pharmacy setting. Pharmacy II is designed to be the third course in a pathway leading to college and career readiness in the healthcare therapeutics professions. The course content aligns with the competencies of pharmacy technician certification examinations.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student exhibits personal and interpersonal knowledge and skills. The student is expected to:

(A) apply appropriate verbal communication in a clear, concise, and effective manner;

(B) apply appropriate non-verbal communication in a clear, respectful, and effective manner;

(C) apply appropriate adaptability skills such as problem solving and creative thinking;

(D) create or evaluate a career plan using methods such as identifying educational pathways, developing career goals, and assessing individual aptitudes;

(E) demonstrate teamwork;

(F) create an occupation-specific resume; and

(G) identify soft skills desired by employers.

(2) The student communicates effectively with diverse populations. The student is expected to:

(A) practice a respectful and professional attitude in communications with diverse patient populations, colleagues, and professionals such as written, oral, and electronic communications;

(B) demonstrate communication techniques that are effective for various population such as terminally ill, intellectually disabled, visually/hearing impaired, and elderly/pediatric populations; and

(C) demonstrate skills for supporting communication between various stakeholders such as serving as a liaison between the nurse and the patient.

(3) The student demonstrates the use of medical terminology and abbreviations in a pharmacy setting. The student is expected to:

(A) interpret and translate prescription and medication orders according to pharmacy settings such as community and hospital environments;

(B) create pharmacy correspondence such as prescriptions, medication administration records (MARs), and patient order sheets using medical terminology and abbreviations;

(C) use medical terminology found in various pharmacy settings to communicate appropriately; and

(D) translate sig codes and abbreviations used in the pharmacy to communicate instructions to patients.

(4) The student applies the strictest requirements using the laws of local, state, and federal agencies. The student is expected to:

(A) demonstrate the proper handling and disposal of non-hazardous, hazardous, and pharmaceutical substances and waste;

(B) apply the requirements for controlled substance prescriptions, including new, refill, and transfer prescriptions;

(C) apply the requirements for receiving, storing, ordering, labeling, and dispensing controlled substances and the reverse distribution, take-back, and loss or theft of controlled substances;

(D) classify controlled substances such as cocaine, heroin, marijuana, fentanyl, dextroamphetamine, amphetamine salts, benzodiazepines, and anabolic steroids according to their Drug Enforcement Administration (DEA) schedules;

(E) identify the federal requirements for restricted drugs such as pseudoephedrine and related medication processing programs such as Risk Evaluation and Mitigation Strategies (REMS) and iPLEDGE;

(F) demonstrate the process for Food and Drug Administration (FDA) recalls based on classification for medications, devices, supplies, and supplements; and

(G) explain pharmacy compliance with professional standards such as scope of practice and relevant legal, regulatory, formulary, contractual, and safety requirements.

(5) The student interprets drug information. The student is expected to:

(A) apply knowledge of brand name, generic name, classification, and indication of use for common medications such as the top 200 drugs with automaticity in a pharmacy setting;

(B) analyze the common and life-threatening drug interactions and contraindications such as drug-disease, drug-drug, drug-lab, and drug-food;

(C) apply knowledge of the narrow therapeutic index (NTI) to drug use evaluations; and

(D) integrate the use of digital and hard copy references such as United States Pharmacopeia (USP) standards, drug reference books, and clinical information sources as needed to perform job duties.

(6) The student demonstrates the dispensing process in various pharmacy settings. The student is expected to:

(A) analyze a prescription and medication order for completeness, including drug strength, dosage form, directions, quantity, date, and refills, and obtain missing information if needed;

(B) communicate with patients or care givers using the appropriate modality to obtain information, including demographics, medication history, health conditions, allergies, and insurance, for the patient profile;

(C) collect, organize, and record demographic and clinical information accurately for patient continuity of care;

(D) identify the required steps in preparing sterile compounded products, including donning personal protective equipment (PPE), cleaning the vertical or horizontal flow hoods, selecting correct supplies, and preparing the product for dispensing;

(E) select the appropriate equipment and supplies, including diabetic supplies, spacers, and oral/injectable syringes, for drug administration based on package size and unit dose;

(F) apply lot numbers, expiration dates, and National Drug Codes (NDC) on drug packaging for the dispensing of medication; and

(G) differentiate between the use of effective infection control procedures such as sterile and non-sterile compounding in various pharmacy related settings.

(7) The student analyzes common medication errors and practices error prevention strategies. The student is expected to:

(A) use knowledge of high alert/risk and look-alike/sound-alike (LASA) medications to prevent medication errors;

(B) apply knowledge of current error prevention strategies such as using Tall Man lettering, trailing/leading zeros, and bar-codes; separating inventory; and limiting use of error-prone abbreviations to prevent medication errors;

(C) apply knowledge of various prescription errors such as abnormal dose, early refill, incorrect quantity, incorrect patient, and incorrect drug for improved accuracy;

(D) demonstrate how to assist pharmacists in recognizing issues that require intervention such as adverse drug events, drug utilization review (DUR), and use of equipment and devices; and

(E) demonstrate knowledge of medication errors such as near miss and adverse events and various reporting procedures such as MedWatch, vaccine adverse event reporting system (VAERS), and route-cause analysis (RCA).

(8) The student applies pharmacy workflow procedures according to federal, state, local, and facility guidelines. The student is expected to:

(A) describe the process for creating a prescription or medication order in compliance with pharmacy standards such as stan-

dards for patient rights, completeness of a prescription or medication order, and authorization;

(B) discuss the steps in verifying a prescription or medication order such as right patient, right drug, right dosage, right time, and right route;

(C) identify the proper procedures for entering a prescription or medication order, including procedures for workstation, use of technology, validation with drug enforcement administration (DEA) calculations, and transcribing such as using military time and Roman numerals;

(D) apply the proper techniques for filling a prescription or medication order such as techniques for use of technology, counting, and selecting the correct medication;

(E) explain the proper procedure for the administration of prescription or medication orders such as ear drops, eye drops, inhalations, parenteral, and enteral;

(F) demonstrate knowledge of the workflow process for prescriptions and medication orders such as creation of the order, order entry, adjudication, verification, filling, labeling, billing, dispensing, and administration; and

(G) describe the elements of third-party billing for out-patient dispensing, including prescription insurance ID cards, group numbers, BIN numbers, prior authorization, quantity limits, patient co-pays, maximum out-of-pocket costs, and deductibles.

(9) The student evaluates mathematical process standards related to the practice of pharmacy. The student is expected to:

(A) calculate dosage calculations for adults and special populations using conversions, ratios, and dimensional analysis to perform duties in a pharmacy setting;

(B) apply conversions to systems of measurements, including apothecary, metric, and household, to perform duties in a pharmacy setting;

(C) calculate the flow rate (or rate of administration) for an IV solution using ratios and conversions such as milliliters to drops, weight, or hours to minutes;

(D) calculate days supply for a prescription order given a dose and sig;

(E) calculate volume or mass of each of the total parenteral nutrition (TPN) components such as lipids, amino acids, dextrose, calcium, and magnesium;

(F) calculate volume or mass of ingredients needed for compounding both sterile and non-sterile products;

(G) calculate amount needed for percent of weight-to-volume, volume-to-volume, and weight-to-weight based on stock concentration; and

(H) use calculations related to business math in a pharmacy setting, including profit, net profit, discounts, mark-ups, dispensing fee, average wholesale price, depreciation, and third-party.

(10) The student demonstrates the use of technology in a pharmacy setting. The student is expected to:

(A) identify the types and uses of automated dispensing technology such as cabinets, units, and carousels;

(B) demonstrate knowledge and components of pharmacy dispensing software used in the out-patient setting, the in-patient setting, and in-office use dispensing;

(C) apply professional standards using communication technology such as telephone, emails, fax, electronic prescriptions, and social media appropriate for a pharmacy setting;

(D) apply knowledge of technology hardware devices for input and output such as computers, scanners, printers, interface devices, and other devices; and

(E) select and use appropriate technology tools to search for drug information such as pill identification, adverse events, and contraindications.

(11) The student uses critical thinking, scientific reasoning, research, or problem solving to make informed decisions and communicate within and outside the classroom. The student is expected to:

(A) critique the validity and reliability of scientific research such as assessing for bias, conflict of interest, and study design;

(B) demonstrate the ability to independently find valid and reliable sources such as primary, secondary, and tertiary literature;

(C) identify safe use of online resources that maintain the privacy and confidentiality of the user and patient;

(D) analyze online resources used in scientific research;

(E) describe the recent innovations and advances in pharmacy;

(F) identify opportunities for extended learning experiences such as community services, career and technical service organizations (CTSOs), and professional organizations; and

(G) evaluate scientific information extracted from various sources such as accredited scientific journals, institutions of higher learning, current events, news reports, published journal articles, and marketing and promotional materials.

(12) The student performs inventory procedures according to federal, state, local, and facility guidelines. The student is expected to:

(A) analyze proper storage for medications in regard to temperature, light sensitivity, product demand, cost, and restricted access;

(B) analyze therapeutic substitutions and product selection using the knowledge of formularies or preferred product list;

(C) practice procedures for inventory control such as removal of expired/recalled drug products, rotating inventory, performing a physical inventory, and ordering medications/supplies;

(D) explain how just-in-time or drop ship ordering and periodic automatic replenishment (PAR) levels are used to maintain pharmacy inventory;

(E) analyze how laws affect the procedures for purchasing or ordering medications, devices, and supplies; and

(F) analyze lot numbers, expiration dates, and National Drug Codes (NDC) on drug packaging for inventory accuracy.

(13) The student demonstrates knowledge of safety procedures in a pharmacy setting. The student is expected to:

(A) apply appropriate hygiene and cleaning standards, including hand washing and cleaning counting trays, countertops, and equipment;

(B) perform basic safety and emergency preparedness procedures such as basic life support (BLS) and first aid applicable to pharmacy services;

(C) explain the risks of drug diversion to employees, patients, and the community;

(D) explain the potential solutions to minimize drug diversion such as identifying red flags, controlling inventory, and monitoring the prescription drug monitoring program (PDMP);

(E) explain the types and uses of personal protective equipment (PPE) and the steps for donning and doffing PPE; and

(F) explain why collecting and documenting patient allergies are important steps in medication safety.

§127.427. Medical Assistant (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite or corequisite: Anatomy and Physiology. Recommended prerequisite: Medical Terminology. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.

(3) The Medical Assistant course provides students with the knowledge and skills to pursue a career as a medical assistant and to improve college and career readiness. Students will obtain communication skills, clinical ethics knowledge, safety awareness, and information related to medical assisting career opportunities.

(4) To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

(5) Professional integrity in the health science industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.

(6) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(7) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student applies professional standards/employability skills as required by business and industry. The student is expected to:

(A) apply appropriate verbal communication in a clear, concise, and effective manner;

(B) apply appropriate non-verbal communication in a clear, respectful, and effective manner;

(C) apply appropriate adaptability skills such as problem solving and creative thinking;

(D) create or evaluate a career plan using methods such as identifying educational pathways, professional organizations, career goals, continuing education opportunities, and individual aptitudes;

(E) demonstrate teamwork;

(F) create an occupation-specific resume; and

(G) identify and demonstrate soft skills desired by employers in health care.

(2) The student evaluates the roles and responsibilities of the medical assistant as a member of the healthcare team. The student is expected to:

(A) explain the role of the medical assistant in various healthcare settings;

(B) discuss the scope of practice, including responsibilities and limitations of a medical assistant;

(C) explain the level of authority within the healthcare professional hierarchy; and

(D) identify the members of an interdisciplinary healthcare team and their roles such as licensed vocation nurse, registered nurse, primary care provider, specialists, and other allied health professionals.

(3) The student applies professional communication skills to provide information to patients and team members in a healthcare setting. The student is expected to:

(A) demonstrate the ability to report abnormal results in writing and orally to the patient's provider;

(B) demonstrate how to communicate with patients, caregivers, and the interdisciplinary team to assist in the planning, delivery, and coordination of patient-centered care;

(C) evaluate different communication techniques for responding to the needs of individuals in a diverse society;

(D) practice conflict-resolution techniques such as cooperation, contribution, compromise, and collaboration in various situations; and

(E) practice providing patient education on health-related topics such as clean catch urine collection, the risks and benefits of vaccinations, use of a peak-flow, and nebulizer treatments.

(4) The student demonstrates knowledge of healthcare ethical principles in their practice of medical assisting. The student is expected to:

(A) evaluate principles of ethical behavior, including beneficence, non-maleficence, justice, and autonomy;

(B) debate ethical issues related to technological advances in health care such as stem cells, robotics, and immunologic therapies in health care;

(C) evaluate ethical issues and legal ramifications related to malpractice, negligence, and liability; and

(D) summarize legal and ethical standards, including Patient Bill of Rights, Advanced Directives, and the Health Insurance Portability and Accountability Act (HIPAA).

(5) The student demonstrates knowledge of the administrative duties of a medical assistant in a healthcare setting. The student is expected to:

(A) identify considerations for scheduling a patient such as availability of test results, availability of staff, patient flow, triage, and coordination of care;

(B) discuss considerations related to managing an office schedule such as types of scheduling, under booking, over booking, cancellations, add-ons, and no-shows;

(C) define the terms used in medical billing such as diagnosis codes, billing codes, billing cycle, co-pay, deductibles, maximum out-of-pocket, and time of service;

(D) describe the elements of completing patient registration such as recording demographics, emergency contact, and insurance information;

(E) analyze different types of health insurance coverage, including Medicare, Medicaid, TRICARE, Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA), private insurance, employer-based insurance, and workers' compensation;

(F) identify the components of an insurance card such as plan name, group number, ID number, patient co-pay, co-insurance, and phone numbers;

(G) define insurance plan terminology such as prior authorization, formulary, explanation of benefits, denial, appeal, and referrals;

(H) define electronic health records systems and their components such as demographics, financial insurance information, orders and referrals, correspondence, and test results; and

(I) analyze the benefits and risks of electronic health records systems.

(6) The student uses appropriate medical terminology as a medical assistant. The student is expected to:

(A) use directional terms and anatomical planes related to body structure;

(B) use occupationally specific terms such as terms relating to the body systems, surgical and diagnostic procedures, diseases, and treatment; and

(C) apply knowledge of prefixes, suffixes, and root words to translate medical terms to conversational language to facilitate communication.

(7) The student practices or models patient intake skills as a medical assistant. The student is expected to:

(A) collect and document patient information during an intake interview, including chief complaint; patient care team; past medical, surgical, social, and family histories; patient allergies; and comprehensive medication list;

(B) explain how to use a medical chart to identify patient care needs;

(C) identify normal ranges for vital signs per age group, including blood pressure, temperature, heart rate, respiratory rate, and oxygen saturation;

(D) measure and record accurate vital signs, including manual blood pressure, temperature, heart rate, respiratory rate, and pain scale;

(E) measure and record accurate anthropometric measurements, including height, weight, and head circumference; and

(F) calculate accurate conversions between different units of measurement such as kilograms to pounds, centimeters to inches, and Fahrenheit to Celsius.

(8) The student demonstrates knowledge and application of point of care testing as a medical assistant. The student is expected to:

(A) define point of care testing;

(B) identify and correlate specimen types and collection methods, including throat swabs, capillary blood, and urine used in point of care testing;

(C) describe tests that might be performed as a point of care test in an office such as rapid strep, rapid flu, glucose, urine dip, urine pregnancy, vision screening, and electrocardiogram (EKG) tests;

(D) perform and document a vision screening using the Snellen eye chart; and

(E) locate landmarks for performing a 12-lead electrocardiogram (EKG).

(9) The student demonstrates knowledge of medication preparation and administration in a clinical setting specific to the role of a medical assistant. The student is expected to:

(A) apply the six rights of medication administration, including right patient, right medication, right dose, right time, right route, and right documentation;

(B) identify drug classifications and the indication for use;

(C) define drug-related terms, including adverse event, therapeutic response, side effect, drug interactions, and allergic reaction;

(D) calculate the amount of medication to administer based on the dosage ordered and the strength of medication supply on hand;

(E) evaluate a patient for known allergies and contraindications prior to administering any medication;

(F) identify routes of medication administration, including oral, buccal, sublingual, inhaled, intranasal, otic, ophthalmic, intravaginal, anal, topical, transdermal, intradermal, subcutaneous, intramuscular, intravenous, and intrathecal;

(G) use proper technique when preparing medications for administration, including injections, oral, sublingual, inhaled, otic, ophthalmic, and topical;

(H) use proper technique when administering medications, including injections, oral, sublingual, inhaled, otic, ophthalmic, and topical;

(I) identify appropriate muscle groups for intramuscular injections, including deltoid, vastus lateralis, and ventrogluteal;

(J) explain the factors that influence intramuscular injection site selection, including patient size, patient age, viscosity of medication, and muscular density;

(K) explain the factors that affect needle size and gauge selection, including medication viscosity, patient size, muscular density; and

(L) demonstrate knowledge of syringe styles and markings on various size syringes such as Luer Lock, oral, insulin, TB, 1ml, 3ml, 5ml, and 10ml syringes.

(10) The student demonstrates knowledge of collecting, labeling, storing, and transferring lab specimens. The student is expected to:

(A) identify how to properly store and transfer lab specimens such as blood, urine, fecal, and sputum samples;

(B) list the proper order of draw for blood collection tubes;

(C) select the proper collection tubes for specific types of blood tests such as complete blood count (CBC), comprehensive metabolic panel (CMP), and lipid panel;

(D) locate veins used for blood draws;

(E) demonstrate proper technique and post procedural care for venous blood draws; and

(F) demonstrate proper labeling of lab specimens, including patient name, date of birth, source, date, time, and initials of collector.

(11) The student demonstrates knowledge of patient populations and their specific care considerations. The student is expected to:

(A) discuss and identify stages of development throughout a patient's lifespan;

(B) describe coping and defense mechanisms exhibited by patients such as emotion-focused behaviors, problem-focused behaviors, denial, displacement, intellectualization, projection, rationalization, and regression;

(C) identify and discuss end-of-life considerations such as advanced directives, power of attorney, stages of grief, and family support;

(D) practice appropriate methods of care for working with patients with mental, physical, and developmental disabilities;

(E) explain how socioeconomic factors such as income, transportation, access to community resources, employment, and education level can influence patient outcomes; and

(F) explain how various multicultural values can affect patient care decisions.

(12) The student demonstrates knowledge of safety practices and procedures as related to medical assisting. The student is expected to:

(A) employ standard precautions in a healthcare scenario;

(B) identify various modes of disease transmission, including vector borne, air borne, direct or indirect contact, and vehicle;

(C) distinguish between the types of isolation precaution signage used to address modes of disease transmission such as contact, droplet, and airborne;

(D) identify personal protective equipment (PPE);

(E) apply the knowledge of PPE used in various situations such as venipuncture, collecting a throat swab, or dipping urine;

(F) demonstrate proper donning and doffing of PPE;

(G) define the use of a sharps container, biohazard container, shredding bin, and trash receptacle;

(H) practice safe handling of sharps such as not recapping after injection and prompt disposal in a sharps container;

(I) identify symptoms of anaphylaxis and the proper emergency response;

(J) explain storage requirements for medications, vaccines, and lab specimens;

(K) locate and use the safety data sheets (SDS) to retrieve information such as proper storage, clean up, and exposure response; and

(L) define and apply knowledge of medical asepsis.

§127.428. *Pharmacology (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: a course from the Health Science Career Cluster. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. It is an ever-changing, growing body of information that continually demands greater amounts of time and education from healthcare workers.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student applies professional standards/employability skills as required by the healthcare system. The student is expected to:

(A) apply appropriate verbal and non-verbal communication in a clear, concise, and effective manner;

(B) apply appropriate adaptability skills such as problem solving and creative thinking;

(C) create and evaluate a career plan using methods such as educational pathways, career goals, and individual aptitudes;

(D) demonstrate teamwork;

(E) create an occupation-specific resume; and

(F) identify and apply soft skills desired by employers.

(2) The student explores the field and foundation of pharmacology. The student is expected to:

(A) differentiate between pharmacology subdivisions, including pharmacodynamics, pharmacokinetics, pharmaceuticals, and pharmacotherapeutics;

(B) use common drug information materials such as accredited scientific journals, institutions of higher learning, current events, news reports, published journal articles, textbooks, and marketing materials;

(C) list examples of primary, secondary, and tertiary drug information references;

(D) research and describe the history of pharmacy and contributions of the field;

(E) draw inferences based on data from promotional materials for products and services;

(F) analyze the societal impact of medication costs; and

(G) evaluate the impact of scientific research on society, including drug development and the natural environment, including drug disposal.

(3) The student identifies careers associated with pharmacology. The student is expected to:

(A) evaluate career pathways utilizing pharmacology;

(B) define the role of the pharmacy team; and

(C) research and describe emerging opportunities within the pharmacy profession.

(4) The student explains the ethical and legal responsibilities associated with pharmacology. The student is expected to:

(A) explain the causes, effects, and consequences associated with medical errors, including medication errors;

(B) define legal terminology associated with medical errors such as negligence, product liability, contributory negligence, and regulatory law;

(C) analyze the principles of medical ethics, including beneficence, autonomy, maleficence, and justice; and

(D) evaluate professional liability.

(5) The student uses medical terminology to communicate effectively with other healthcare professionals, patients, and caregivers. The student is expected to:

(A) use the appropriate medical terminology to identify different classes of drugs;

(B) communicate using medical terminology associated with pharmacology;

(C) analyze unfamiliar terms using the knowledge of word roots, suffixes, and prefixes; and

(D) interpret medical terminology to communicate with patients and caregivers.

(6) The student demonstrates mathematical knowledge and skills to solve problems with systems of measurement used in the pharmacy. The student is expected to:

(A) calculate medication dosages using formulas, ratios, proportions, and allegations;

(B) convert a measurement expressed in one standard unit within a system to a measurement expressed in another unit within the same system;

(C) convert a measurement expressed in one system to a unit of the same measurement in a different system, including metric, apothecary, avoirdupois, and household systems; and

(D) evaluate statistical data and its limitations such as patient compliance, study design, and controls.

(7) The student evaluates pharmaceutical agents, their dosage form, and routes of administration. The student is expected to:

(A) analyze the availability of different dosage forms such as solid, liquid, patch, and IV solution;

(B) give examples of the brand or generic names of drugs such as the top 200 drugs in each dosage form and routes of drug administration;

(C) define medical terminology associated with drug dosage forms;

(D) explain the difference between therapeutic effects, side effects, and toxic effects;

(E) identify the mechanism of action of different drug classifications such as drug receptors, agonists, and antagonist relationships;

(F) explain the dose response relationship concept such as the difference between oral and IV administration of drugs and explain the relationship between drug dosage, drug response, and time; and

(G) explain drug safety practices such as monitoring expiration dates and drug disposal.

(8) The student demonstrates knowledge and use of appropriate equipment, instruments, and technology. The student is expected to:

(A) identify technology components used in the pharmacy workflow such as ordering, entering, filling, and dispensing;

(B) describe how technology applications improve efficiency in the pharmacy; and

(C) identify and demonstrate proper use and maintenance of equipment and instruments used in a pharmacy setting such as IV drop sets, scales, glucose supplies, dispensing units or cabinets, and other laboratory supplies.

(9) The student practices safe protocols in preventing personal and client illness or injury. The student is expected to:

(A) employ safety standards such as workplace standards;

(B) interpret and apply pharmacy standards according to the strictest local, state, or federal regulations to enhance safety;

(C) examine the consequences of unsafe practices; and

(D) demonstrate safe procedures in the administration of client care in a simulated or clinical setting.

§127.429. *Respiratory Therapy I (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite or corequisite: Anatomy and Physiology. Recommended prerequisite: a course from the Health Science Career Cluster. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) Respiratory Therapy I is a technical lab course that addresses knowledge and skills related to cardiopulmonary medicine. Respiratory therapists are specialized healthcare practitioners trained in cardiopulmonary medicine to work therapeutically with people suffering from cardiopulmonary diseases. Students will learn basic knowledge and skills performed by respiratory therapists using equipment such as: stethoscopes, sphygmomanometers, thermometers, pulse oximeters, oxygen delivery devices (nasal cannula, masks of various types), nebulizers, and airway clearance and hyperinflation therapy devices.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations, including:

(A) work-based experiences/learning; and

(B) volunteering/shadowing opportunities.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards and employability skills required by the respiratory therapy profession. The student is expected to:

(A) model professionalism associated with respiratory therapy such as adaptability, time management, punctuality, appreciation for diversity, decision-making, dedication, and organizational and leadership skills;

(B) demonstrate effective verbal and non-verbal communication in a clear and concise manner;

(C) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with language differences/barriers and sensory loss;

(D) evaluate the effectiveness of conflict resolution techniques in various situations; and

(E) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team.

(2) The student applies mathematics, science, English language arts, and social studies in respiratory therapy. The student is expected to:

(A) interpret complex technical material related to respiratory therapy;

(B) identify the impact of cultural diversity on patient care such as differences in race, culture, and religion;

(C) solve mathematical calculations related to respiratory therapy; and

(D) summarize biological and chemical processes that maintain homeostasis.

(3) The student investigates the history and profession of respiratory therapy, including education and licensure. The student is expected to:

(A) analyze the advancement of respiratory therapy practices over time;

(B) summarize the roles of respiratory therapists in various settings; and

(C) identify academic requirements for respiratory therapist and professional advancement opportunities such as professional organizations, credentials, certifications, registrations, licensure, continuing education, and advanced degrees.

(4) The student applies regulatory and safety standards in a respiratory therapy setting. The student is expected to:

(A) identify and conform to regulations and guidelines from entities such as the World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), U.S. Food and Drug Administration (FDA), The Joint Commission, the National Institute of Health (NIH), Texas Commission on Environmental Quality (TCEQ), Texas Department of State and Health Services (DSHS), and American Association for Respiratory Care (AARC);

(B) identify infection control standard and transmission-based precautions in the patient care setting, including hand hygiene, equipment sterilization, and the use of personal protective equipment (PPE); and

(C) identify industry safety standards, including standards for body mechanics, fire prevention, electrical safety, oxygen safety, and the handling of hazardous materials.

(5) The student investigates the structure and function of cardiopulmonary anatomy. The student is expected to:

(A) analyze the cardiovascular system, including ventricles, atrium, valves, blood vessels, nerves, blood flow, and cardiac conduction system;

(B) explain the respiratory system, including airways, trachea, lungs, and pulmonary vessels that aid the body in the exchange of gases;

(C) trace the blood flow through the cardiopulmonary system; and

(D) examine a variety of human diseases and disorders affecting the cardiopulmonary system such as chronic obstructive pulmonary disease (COPD), asthma, pneumonia, cystic fibrosis, and lung cancer.

(6) The student develops knowledge pertaining to respiratory therapy procedures. The student is expected to:

(A) demonstrate the use of breathing exercises for patients with cardiopulmonary disease such as pursed lipped breathing and diaphragmatic breathing;

(B) explain the use of hyperinflation and airway clearance therapies;

(C) explain the use of tracheostomy and endotracheal tubes and oral and nasal airway devices for assisted breathing;

(D) identify anatomy of the heart and lungs and proper endotracheal tube placement on X-ray;

(E) explain the use of oximetry and arterial blood-gases for patient assessment;

(F) identify and explain the use of the equipment for oxygen therapies such as nasal cannula, high flow nasal cannula, simple masks, air-entrainment masks, partial rebreather masks, and non-rebreather masks; and

(G) demonstrate the administration of oxygen therapy using oxygen concentrators and portable cylinders.

(7) The student recognizes cardiopulmonary pharmaceutical agents and safety and protocol measures. The student is expected to:

(A) identify medications used in respiratory therapy, including bronchodilators and inhaled corticosteroids;

(B) summarize indications, contraindications, and side effects of respiratory medications;

(C) discuss delivery of respiratory medications such as nebulizers and meter dose inhalers (MDI); and

(D) assess the impact of cardiopulmonary agents on vital signs.

(8) The student implements the knowledge and skills of respiratory therapy professionals in a laboratory setting. The student is expected to:

(A) demonstrate patient assessment of vital signs, including blood pressure, pulse, respiratory rate, temperature, oxygenation, and ventilation status;

(B) demonstrate patient positioning for respiratory comfort and procedures;

(C) demonstrate patient care techniques used in high stress respiratory therapy situations such as non-compliant, combative, and distressed patients; and

(D) demonstrate correct cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) skills.

(9) The student evaluates ethical behavioral standards and legal responsibilities in the respiratory therapy profession. The student is expected to:

(A) examine legal and ethical behavior standards such as the Patient's Bill of Rights, advanced directives, and the Health Insurance Portability and Accountability Act (HIPAA);

(B) investigate and discuss the legal and ethical ramifications of unacceptable behavior in therapeutic practice;

(C) research and describe role of professional associations and regulatory agencies; and

(D) describe ethical dilemmas in health care.

§127.430. Respiratory Therapy II (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grade 12. Prerequisite: Respiratory Therapy I. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) Respiratory Therapy II is a technical lab course that addresses knowledge and skills related to critical care and cardiopulmonary medicine. Respiratory therapists are specialized healthcare

practitioners trained in cardiopulmonary medicine to work therapeutically with people suffering from cardiopulmonary diseases. Students will learn advanced knowledge and skills performed by respiratory therapists using equipment such as stethoscopes, sphygmomanometers, thermometers, pulse oximeters and monitors, oxygen delivery devices (nasal cannula, masks of various types), nebulizers, airway clearance and hyperinflation therapy devices, spirometers, and intubation mannequin heads and equipment (endotracheal tubes, laryngoscopes, stylets).

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations, including:

(A) work-based experiences/learning; and

(B) volunteering/shadowing opportunities.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards and employability skills required by the respiratory therapy profession. The student is expected to:

(A) model professionalism associated with respiratory therapy such as adaptability, time management, punctuality, appreciation for diversity, decision-making, dedication, and organizational and leadership skills;

(B) demonstrate effective verbal and non-verbal communication in a clear and concise manner;

(C) demonstrate therapeutic communication appropriate to the situation, including communication with individuals with language differences or barriers and sensory loss;

(D) evaluate the effectiveness of conflict resolution techniques in various situations;

(E) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team; and

(F) explore career options for respiratory therapy and preparation necessary for employment such as creating a cover letter and resume, completing an application, and conducting mock interviews.

(2) The student applies mathematics, science, English language arts, and social studies in respiratory therapy. The student is expected to:

(A) analyze complex technical material related to respiratory therapy;

(B) analyze the impact of cultural diversity such as differences in race, culture, and religion on patient care;

(C) apply mathematical calculations related to respiratory therapy; and

(D) analyze biological and chemical processes that affect homeostasis in relation to cardiopulmonary diseases.

(3) The student applies safety standards for a respiratory therapy setting. The student is expected to:

(A) evaluate and apply standards and guidelines from entities, including the American Association for Respiratory Care (AARC), World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), U.S. Food and Drug Administration

(FDA), and Texas Commission on Environmental Quality (TCEQ), as they apply to cardiopulmonary diseases;

(B) demonstrate infection control standard and transmission-based precautions in the laboratory setting, including hand hygiene, equipment sterilization, and the use of personal protective equipment (PPE); and

(C) model industry safety standards, including standards for body mechanics, fire prevention, electrical safety, oxygen safety, and the handling of hazardous materials.

(4) The student explains the interactions between the cardiopulmonary and other body systems as they relate to wellness and diseases. The student is expected to:

(A) analyze the role of the autonomic nervous system in the regulation of the cardiopulmonary system as it pertains to health and illness;

(B) analyze the role of the urinary system in the regulation of the acid-base and fluid balance and in cardiopulmonary health and illness;

(C) investigate the interactions between body systems and cardiopulmonary diseases and disorders such as Guillain-Barré syndrome, Myasthenia Gravis, SARS-CoV-2 (Covid), Idiopathic Pulmonary Fibrosis (IPF), adult respiratory distress syndrome (ARDS), and congestive heart failure (CHF);

(D) differentiate between normal heart rhythms and common cardiac dysrhythmias such as ventricular fibrillation, ventricular tachycardia, and asystole attributed to malfunctions in other body systems; and

(E) discuss the role of respiratory therapists in the use of mechanical systems, including non-invasive and invasive mechanical ventilators and extracorporeal membrane oxygenation (ECMO), when the cardiopulmonary system fails.

(5) The student implements the knowledge and skills of a respiratory therapy professional used in a laboratory setting. The student is expected to:

(A) demonstrate breathing exercises commonly used for patients with cardiopulmonary disease;

(B) demonstrate airway management skills in a laboratory setting using equipment for intubation and airway maintenance such as endotracheal and tracheostomy tubes, endotracheal/tracheal suction catheters, laryngoscopes, bag valve mask devices, oral and nasal airways, tube fasteners, or tape;

(C) demonstrate airway clearance and hyperinflation therapies in a laboratory setting using equipment such as oscillating positive end pressure devices, high frequency chest wall oscillation devices, and an incentive spirometer;

(D) differentiate between normal lung and pathology in a chest X-ray;

(E) recognize typical and atypical arterial blood-gas values related to patient oxygenation and ventilation status;

(F) demonstrate the use of the oxygen therapy equipment such as nasal cannula, high flow nasal cannula, simple masks, air-entrainment masks, partial rebreather masks, non-rebreather masks, and non-invasive ventilators;

(G) demonstrate patient assessment methods, including inspection, auscultation, palpitation, and percussion;

(H) interpret and create a basic care plan for asthma and chronic obstructive pulmonary disease (COPD);

(I) demonstrate the role of a respiratory therapist during simulated emergency situations such as situations requiring a rapid response team and advanced cardiac life support; and

(J) describe the respiratory therapists' role in patient education regarding the disease process and proper use of medication and respiratory equipment.

(6) The student understands cardiopulmonary pharmaceutical agents and safety. The student is expected to:

(A) research and identify the application of medications used in respiratory therapy, including bronchodilators, inhaled corticosteroids, mucolytics, biologics, inhaled antibiotics, inhaled pulmonary vasodilators, and antivirals;

(B) evaluate indications, contraindications, and side effects of respiratory medications;

(C) demonstrate delivery methods of medication such as nebulizers and meter dose inhalers (MDI); and

(D) evaluate patient response to therapy before, during, and after respiratory treatments such as heart rate, blood pressure, respiration, and breath sounds.

(7) The student evaluates ethical behavioral standards and legal responsibilities in the respiratory therapy profession. The student is expected to:

(A) analyze legal and ethical scenarios as it relates to the Patient's Bill of Rights and the Health Insurance Portability and Accountability Act (HIPAA);

(B) evaluate the legal and ethical ramifications of unacceptable behavior in therapeutic practice; and

(C) describe ethical dilemmas in respiratory therapy such as advanced directives, palliative care, hospice, and end-of-life care.

(8) The student identifies academic preparation and skills necessary for employment in the field of respiratory therapy. The student is expected to:

(A) research and identify academic requirements for professional advancement such as credentials, certifications, licensure, registration, continuing education, and advanced degrees; and

(B) research and identify the path to obtain and maintain entry level licensure and credentialing.

§127.431. Leadership and Management in Nursing (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: a course from the Health Science Career Cluster. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services,

health informatics, support services, and biotechnology research and development.

(3) This course is designed to explore leadership and management in nursing, studying topics such as ethics, educational levels, career paths, regulatory bodies, and personal and professional leadership skills.

(4) Students are encouraged to participate in extended learning experiences such as Health Occupations Students of America (HOSA), Skills USA, career and technical student organizations, and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner; and

(B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team.

(2) The student understands the different educational levels of licensed nurses and applicable careers and career pathways. The student is expected to:

(A) compare the differences between the educational requirements and roles of a licensed vocational nurse and a registered nurse;

(B) diagram the educational requirements of a registered nurse, including diploma, associate degree, bachelor's degree, master's degree, and doctoral degree;

(C) identify the different specializations of a nurse with a master's degree such as family nurse practitioner, nurse informaticist, nurse midwife, and nurse educator;

(D) differentiate the roles of the Doctor of Philosophy (PhD) and the Doctor of Nursing Practice (DNP) prepared nurse; and

(E) develop a six-year career plan in nursing.

(3) The student understands the functions of leadership in nursing. The student is expected to:

(A) illustrate or diagram the relationship and progression within the hierarchy of nursing leadership;

(B) identify critical skills and competencies for each level in the hierarchy of nursing leadership;

(C) present and examine the impact of each level of nursing in the hierarchy of leadership; and

(D) investigate and analyze different leadership styles and how they are used in different situations.

(4) The student demonstrates personal and professional leadership qualities and competencies. The student is expected to:

(A) identify different personal growth practices such as self-reflection, introspection, self-care, and journaling;

(B) describe and demonstrate intrapersonal skills such as empathy, patience, risk-taking, confidence, integrity, personal values and ethics, punctuality, and goal setting;

(C) examine personal and professional values and ethics;

(D) research and develop a plan to coach and mentor others; and

(E) evaluate decision-making processes such as delegation, problem-solving processes such as conflict management, and processes to support patient satisfaction, patient safety, and patient advocacy.

(5) The student demonstrates the appropriate use of communication techniques. The student is expected to:

(A) examine communication platforms and apply the appropriate professional response in different mediums such as telephone, email, text, electronic health records, and face to face;

(B) demonstrate professional written and verbal communication skills for individuals and teams using communication tools such as Situation Background Assessment and Recommendation (SBAR) and Acknowledge Introduce Duration Explanation and Thank you (AIDET);

(C) determine appropriate communication methods for urgent, emergent, and non-urgent situations such as team strategies and tools to enhance performance and patient safety (TeamSTEPS); and

(D) demonstrate receiving and giving constructive criticism.

(6) The student understands the definition and application of time management. The student is expected to:

(A) demonstrate how to create an agenda that prioritizes tasks, duties, and responsibilities that must be completed, including required meetings and communications;

(B) differentiate goals that advance professional growth and responsibility and non-professional goals;

(C) identify factors that inhibit the good use of time and apply strategies that mitigate the loss of time; and

(D) demonstrate how to manage long- and short-term personal and professional schedules by creating and updating a yearly calendar.

(7) The student understands how to build and manage interdisciplinary teams and facilitate teamwork. The student is expected to:

(A) define and explain the purpose of an interdisciplinary team and the role of each member;

(B) develop a plan for creating a team through team-building exercises, culture and climate awareness, and interpersonal skills;

(C) define and apply techniques to manage personal conflict within teams; and

(D) describe the stages of team evolution such as forming, storming, norming, performing, and transforming.

(8) The student understands regulatory agencies and boards and their related requirements. The student is expected to:

(A) identify the role and responsibility of the Board of Nursing, including establishing graduation and licensure requirements;

(B) identify federal, state, and local regulatory agencies such as local hospital boards, Health and Human Services, The Joint Commission, and Center for Medicare and Medicaid Services;

(C) define and identify the nursing scope of practice;

(D) compare the difference between a certification and licensure; and

(E) compare the role of the Board of Nursing and professional nursing organizations.

§127.432. Practicum in Nursing (Two Credits), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology, one credit in chemistry, and at least one course from the Health Science Career Cluster. Recommended prerequisites: Science of Nursing, Medical Terminology, and Anatomy and Physiology. Students shall be awarded two credits for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) Practicum in Nursing is designed to give students practical applications of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

(4) To pursue a career in the nursing industry, students should learn to reason, think critically, make decisions, solve problems, and communicate effectively. Students should recognize that quality health care depends on the ability to work well with others.

(5) The health care industry is comprised of diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems that function individually and collaboratively to provide comprehensive health care. Students recognize the employment opportunities, technology, and safety requirements of each system. Students are expected to apply the knowledge and skills necessary to pursue a health science certification or licensure through further education and employment.

(6) Professional integrity in the health care industry is dependent on acceptance of ethical and legal responsibilities. Students are expected to employ their ethical and legal responsibilities, recognize limitations, and understand the implications of their actions.

(7) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(8) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner; and

(B) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team.

(2) The student applies mathematics, science, English language arts, and social sciences in nursing. The student is expected to:

(A) solve mathematical calculations appropriate to situations in a health-related environment;

(B) communicate using medical terminology;

(C) express ideas in writing and develop skills in documentation;

(D) interpret complex technical material related to the health science industry;

(E) summarize biological and chemical processes that maintain homeostasis;

(F) explain changes in body structure due to trauma and disease; and

(G) research the global impact of disease prevention and cost containment.

(3) The student models ethical behavior standards and legal responsibilities. The student is expected to:

(A) apply facility and industry standard policies and procedures, including the Health Insurance Portability and Accountability Act (HIPAA);

(B) research and present case studies related to legal and ethical issues in health care;

(C) recognize and analyze professional boundaries of patient relationships; and

(D) model safe practices, including infection control, proper body mechanics, and patient handling.

(4) The student explores the knowledge and skills of the nursing process for assessment. The student is expected to:

(A) perform and assess subjective data during a patient intake in a clinical or simulated setting by:

(i) performing a complete health history, including family and social data; and

(ii) assessing the chief complaint, history of present illness, past medical history, and a review of systems; and

(B) perform and assess objective data during a patient intake in a clinical or simulated setting by demonstrating:

(i) the skill of obtaining core vital signs;

(ii) the skill of obtaining and assessing height and weight and weight fluctuations; and

(iii) the performance of a head-to-toe physical assessment.

(5) The student explores the knowledge and skills of the nursing process for implementation or intervention. The student is expected to:

(A) demonstrate the proper use and application of medical equipment related to oxygen therapy, glucometers, pulse oximeters, catheters, incentive spirometers, mobility devices, patient handling devices, and electric hospital beds and chairs;

(B) demonstrate patient care, including care related to activities of daily living (ADL), patient positioning, patients' range of motion, basic first aid, patient transfers, and patient transport;

(C) demonstrate skills related to or acquire basic life support (BLS) certification as required by industry standards; and

(D) demonstrate the skills necessary to track nutrition and elimination such as input and output (I&O) and types of diets.

(6) The student explores the knowledge and skills of the nursing process of evaluation and re-evaluation. The student is expected to:

(A) compare normal and abnormal healthcare data;

(B) identify how to report trends and abnormal findings to appropriate personnel according to facility protocols; and

(C) explain the significance of abnormal findings.

(7) The student explores the knowledge and skills of the nursing process of documentation. The student is expected to:

(A) document objective data using medical terminology;

(B) document subjective data using medical terminology; and

(C) record documentation using various models such as Situation, Background, Assessment, and Recommendation (SBAR); Acknowledge, Introduce, Duration, Explanation, and Thank you (AIDET); and Subjective, Objective, Assessment Plan (SOAP).

(8) The student is expected to provide care for diverse populations such as persons from varying age groups and persons with physical limitations or mental health needs in clinical or simulated environment. The student is expected to:

(A) demonstrate appropriate usage of verbal and non-verbal communication techniques for providing care to persons from diverse populations; and

(B) apply appropriate techniques for assessments and care.

(9) The student is expected to provide culturally appropriate care. The student is expected to:

(A) use culturally appropriate verbal and non-verbal communication skills; and

(B) demonstrate patient interaction strategies for assessments and care.

§127.433. Medical Microbiology (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: a course from the Health Science Career Cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

(3) The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug-resistant organisms, and emerging diseases.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate verbal and non-verbal communication in a clear, concise, and effective manner;

(B) demonstrate the ability to cooperate, contribute, and collaborate as a member of a team; and

(C) locate, evaluate, and interpret career options, opportunities, and postsecondary transitions relating to the field of microbiology.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as microscopes, slides, streak plates, inoculating loops, Bunsen burners, striker, hot plate, petri dish, agar and other growth mediums, reactive agents, personal protective equipment (PPE), disposable pipettes, lab glassware and instruments, bacterium and other live microbial agents, enzymes, computer software and probes, incubator, and autoclave;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using equipment such as graphing calculator, computer software and probes, graphic organizers;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) or health science field in order to investigate careers.

(6) The student examines the field of microbiology in relation to medical care. The student is expected to:

(A) examine the historical development of microbiology as it relates to health care of an individual in modern medicine; and

(B) compare the roles, functions, and responsibilities of agencies governing infectious disease control.

(7) The student is expected to perform and analyze results in the microbiology laboratory. The student is expected to:

(A) classify microorganisms using a dichotomous key;

(B) prepare slides and discuss the differences between Gram positive and Gram negative bacteria such as the bacterial cell wall and the use of oxygen;

(C) identify chemical processes such as enzyme catalyst and osmotic potential of microorganisms;

(D) identify and discuss technologies used in a laboratory setting such as polymerase chain reaction (PCR), serology, enzyme-linked immunoassay (ELISA), and electrophoresis;

(E) prepare plates or active mediums to differentiate the factors required for microbial reproduction and growth;

(F) identify the normal flora microorganisms of the human body;

(G) identify and differentiate between various pathogens, including opportunistic pathogens, hospital-acquired infections, community-acquired infections, and colonizing microorganisms;

(H) isolate colonies and describe the morphology of microorganisms; and

(I) interpret and explain the role of the culture and sensitivity report provided to the clinician.

(8) The student examines the role of microorganisms in infectious diseases. The student is expected to:

(A) outline and explain the infectious disease process, including how pathogenic microorganisms affect human body systems;

(B) categorize diseases caused by bacteria, including *Rickettsia*, fungi, viruses, protozoa, arthropods, and helminths;

(C) explain and interpret the body's immune responses and defenses against infection;

(D) prepare a bacterial colony and evaluate the effects of anti-microbial agents such as narrow and broad-spectrum antibiotics;

(E) examine the environmental and social causes of the emergence and reemergence of diseases such as corona viruses, Ebola, malaria, tuberculosis, and polio;

(F) research and discuss drug *aureus*-resistant microorganisms, including carbapenem-resistant *Enterobacteriaceae*, methicillin-resistant *Staphylococcus aureus*, vancomycin-intermediate/resistant *Staphylococci*, vancomycin-resistant enterococci, and emergent antibiotic-resistant superbugs; and

(G) outline the role of governing agencies in monitoring and establishing guidelines based on the spread of infectious diseases.

(9) The student recognizes the importance of maintaining a safe environment and eliminating hazardous situations. The student is expected to:

(A) identify and apply standard laboratory precautions;

(B) identify and apply microbiological safety practices in accordance with industry standards, including the proper handling, disinfection, and disposal of biological waste and maintenance of containment levels;

(C) identify and apply appropriate personal protection equipment (PPE) and transmission-based precautions, including precautions against droplet, contact, and airborne transmission;

(D) sterilize laboratory and medical equipment and instruments in accordance with industry standards; and

(E) define and select different mechanisms of decontamination such as antiseptics, disinfection, and sterilization.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Director, Rulemaking

Texas Education Agency

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For further information, please call: (512) 475-1497



SUBCHAPTER J. HOSPITALITY AND TOURISM

19 TAC §127.482

STATUTORY AUTHORITY. The new section is proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum required in TEC, §28.002; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; TEC, §28.025(b-2), which requires the SBOE by rule to allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content; and TEC, §28.025(b-17), which requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2) and (b-17).

§127.482. Food Science (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. Recommended prerequisite: Principles of Hospitality and Tourism. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.

(3) In Food Science, students examine the nature and properties of foods, food microbiology, and the principles of science in food production, processing, preparation, and preservation; use scientific methods to conduct laboratory and field investigations; and make informed decisions using critical thinking and scientific problem solving. This course provides students a foundation for further study that leads to occupations in food and beverage services; the health sciences; agriculture, food, and natural resources; and human services.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by the food service business and industry. The student is expected to:

(A) apply interpersonal communication skills in the food service business and industry settings;

(B) explain and recognize the value of collaboration within the workplace;

(C) examine the importance of time management to succeed in the workforce;

(D) identify work ethics and professionalism in a job setting;

(E) describe problem-solving and critical-thinking skills used in the workplace; and

(F) explore careers and professions in food science.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, metric rulers, electronic balances, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, and models, diagrams, or samples of biological specimens or structures, vacuum sealer, oven, cook top, cookware, bakeware, cutlery, and measuring cups and spoons;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics or food science field.

(6) The student analyzes household and commercial sustainability and regulatory practices in food production. The student is expected to:

(A) research and investigate resource use, sustainability, and conservation in food production such as with water, land, and oceans;

(B) analyze the effect of food on the decomposition cycle, including composting, recycling, and disposal; and

(C) demonstrate appropriate methods for sorting and disposing of food waste, including fats and oils, and packaging waste from food production.

(7) The student analyzes the role of acids and bases in food science. The student is expected to:

(A) evaluate physical and chemical properties of acids and bases; and

(B) analyze the relationship of pH to the properties, safety, and freshness of food.

(8) The student evaluates the principles of microbiology and food safety practices. The student is expected to:

(A) investigate the properties of microorganisms that cause food spoilage;

(B) compare food intoxication and food infection;

(C) examine methods to destroy or inactivate harmful pathogens in foods;

(D) compare beneficial and harmful microorganisms, including lactic acid bacteria, acetic acid bacteria, various baking

and brewing yeasts, *E. coli*, *Staphylococcus*, *Clostridium botulinum*, *Clostridium perfringens*, *Salmonella*, *Listeria*, and *Shigella*;

(E) analyze sanitary food-handling practices such as personal hygiene or equipment sanitation; and

(F) prepare for a state or national food manager sanitation certification or alternative credential within the field of food science technology.

(9) The student examines the chemical properties of food. The student is expected to:

(A) describe acids, bases, salts, carbohydrates, lipids, proteins and other elements, compounds, and mixtures related to food science;

(B) compare heterogeneous and homogeneous mixtures;

(C) analyze chemical and physical changes in food; and

(D) use chemical symbols, formulas, and equations in food science such as oxidation of sugars in a cut apple or fermentation in the production of yogurt.

(10) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:

(A) identify the solvent and solute in various solutions such as brines;

(B) compare unsaturated, saturated, and supersaturated solutions, including their effects on boiling and freezing points in food preparation such as when making candy or ice cream;

(C) calculate the concentration of a solution using mass percent such as the concentration of sugar needed for crystallization;

(D) describe the properties of colloidal dispersions such as gelatin, mayonnaise, or milk;

(E) differentiate between and give examples of temporary, semi-permanent, and permanent emulsions;

(F) investigate the relationships between the three parts of a permanent emulsion; and

(G) create temporary, semi-permanent, and permanent food emulsions.

(11) The student analyzes the functions of enzymes in food science. The student is expected to:

(A) describe the role of enzymes as catalysts in chemical reactions of food, including cheese-making, the enzymatic tenderization of meat, and oxidation of sugars in fruit;

(B) explain the relationship between an enzyme and a substrate;

(C) analyze the functions of enzymes in digestion, including the factors that influence enzyme activity, and relate enzymatic activity in digestion to dietary restrictions; and

(D) analyze enzyme reactions in food preparation, including cheese-making, the enzymatic tenderization of meat, and oxidation of sugars in fruit.

(12) The student evaluates the role of fermentation in food science. The student is expected to:

(A) analyze modern and historical reasons food is fermented;

(B) describe the conditions under which bacterial fermentation of food occurs and use chemical equations to describe the products of fermentation; and

(C) prepare various fermented food products.

(13) The student assesses the reaction of leavening agents in baked products. The student is expected to:

(A) describe the physical and chemical changes that occur in leavening;

(B) identify various leavening agents and describe their functions in food production;

(C) use chemical equations to describe how acids act as leavening agents;

(D) conduct laboratory experiments with various types and amounts of leavening agents to compare the doughs and batters produced; and

(E) create baked products using various leavening agents.

(14) The student explores the roles of food additives. The student is expected to:

(A) evaluate the various types of food additives such as incidental, intentional, natural, and artificial;

(B) investigate the various functions of food additives such as preserving food, increasing nutritive value, and enhancing sensory characteristics; and

(C) research local, state, national, and international agencies involved in regulating food additives.

(15) The student analyzes the effects of heat energy transfer in food production. The student is expected to:

(A) analyze the relationship between molecular motion and temperature;

(B) compare heat transfer processes, including conduction, convection, and radiation;

(C) investigate the role of phase changes in food production, including crystallization, coagulation, and reduction; and

(D) demonstrate rates of reaction using various temperatures and describe the effects of temperature on the characteristics of food products.

(16) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:

(A) identify the physical properties and chemical structures of simple and complex carbohydrates;

(B) describe the functions of carbohydrates such as caramelization, crystallization, and thickening agents in food production;

(C) describe the processes of gelatinization and retrogradation in food production; and

(D) create food products using simple and complex carbohydrates.

(17) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:

(A) identify the physical properties and chemical structures of saturated and unsaturated fats;

(B) describe the functions of different types of fats in food production;

(C) demonstrate methods for controlling fat oxidation;

(D) analyze the effects of temperature on fats in food preparation;

(E) conduct laboratory experiments using the scientific processes to explore the functions of fats in food production; and

(F) create food products using saturated and unsaturated fats.

(18) The student evaluates the properties of proteins and their effects on food production. The student is expected to:

(A) identify the physical properties and chemical structures of proteins;

(B) explain the processes of protein denaturation, coagulation, and syneresis;

(C) describe the functions and uses of proteins such as in emulsions, foams, and gluten formation;

(D) analyze the effects of moisture and temperature on protein in food production such as moist and dry heat methods for preparation; and

(E) create food products using protein.

(19) The student evaluates the properties of vitamins and minerals and their interrelationships in food production. The student is expected to compare the effects of food production on water- and fat-soluble vitamins and minerals.

(20) The student evaluates the properties of water and their effects on food production. The student is expected to:

(A) identify the properties of water, including as a solvent or medium, and its effects on food production; and

(B) compare the effects of hard and soft water on food production.

(21) The student explains nutritional aspects of food production. The student is expected to:

(A) describe how variations in human digestion and metabolism affect dietary modifications;

(B) identify common and special dietary modifications such as for food allergies, intolerances, or medical conditions;

(C) develop and modify recipes for dietary differences such as allergies and intolerances or for personal health preferences such as low-fat or sugar-free; and

(D) plan and create a dining experience using the most recent USDA dietary guidelines.

(22) The student analyzes processes that manage bacteria to safe levels during food production. The student is expected to investigate processes that manage food bacteria such as dehydration, pasteurization, and food irradiation.

(23) The student examines packaging and labeling guidelines. The student is expected to:

(A) research and evaluate federal food packaging regulations, including the information required on a food label;

(B) compare global food packaging regulations to those of the United States; and

(C) analyze the effectiveness of commercial food packaging for specific foods.

(24) The student analyzes food preservation processes. The student is expected to:

(A) describe the benefits of food preservation;

(B) compare various methods of household and commercial dehydration, canning, and freezing; and

(C) create a food product using a selected preservation method.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

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For further information, please call: (512) 475-1497



SUBCHAPTER M. LAW AND PUBLIC SERVICE

19 TAC §127.651, §127.652

STATUTORY AUTHORITY. The new sections are proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum required in TEC, §28.002; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; TEC, §28.025(b-2), which requires the SBOE by rule to allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content; and TEC, §28.025(b-17), which requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2) and (b-17).

§127.651. Implementation of Texas Essential Knowledge and Skills for Law and Public Service, Adopted 2021.

(a) The provisions of this subchapter shall be implemented by school districts beginning with the 2022-2023 school year.

(b) No later than August 31, 2022, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for career and technical education as adopted in §127.652 of this subchapter.

(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §127.652 of this subchapter shall be implemented beginning with the 2022-2023 school year and apply to the 2022-2023 and subsequent school years.

(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §127.652 of this subchapter shall be implemented for the following school year.

§127.652. Forensic Science (One Credit), Adopted 2021.

(a) General requirements. The course is recommended for students in Grades 11 and 12. Prerequisites: one credit in biology and one credit in chemistry. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services.

(3) Forensic Science is a survey course that introduces students to the application of science to law. Students learn terminology and procedures related to the collection and examination of physical evidence using scientific processes performed in a field or laboratory setting. Students also learn the history and the legal aspects of forensic science.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to demonstrate professional standards/employability skills such as demonstrating good attendance, punctuality, and ethical conduct; meeting deadlines, and working toward personal and team goals.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain

phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools and equipment such as scientific calculators, computers, internet access, digital cameras, video recording devices, meter sticks, metric rulers, measuring tapes, digital range finders, protractors, calipers, light microscopes up to 100x magnification, hand lenses, stereoscopes, digital scales, dissection equipment, standard laboratory glassware, appropriate personal protective equipment (PPE), an adequate supply of consumable chemicals, biological specimens, prepared evidence slides and samples, evidence packaging and tamper evident tape, evidence tents, crime scene tape, L-rulers, American Board of Forensic Odontology (ABFO) scales, alternate light sources (ALS) and ALS protective goggles, blood specimens, blood presumptive tests, glass samples of various chemical composition, human and non-human bones, fingerprint brushes and powders, lifting tapes and cards, ten-print cards and ink pads, swabs with containers, disposable gloves, and relevant and necessary kits;

(E) collect quantitative data with accuracy and precision using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using appropriate methods of communication such as reports, graphs, tables, or charts;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a science, technology, engineering, and mathematics (STEM) field.

(6) The student explores the history of forensic science. The student is expected to:

(A) analyze the historical development and current advancements of different forensic science disciplines such as forensic biology, anthropology/odontology, forensic chemistry, trace evidence, ballistics, fingerprints, digital forensics, and questioned documents; and

(B) explain significant historical and modern contributions to the development and advancement of forensic science made by contributors such as Edmond Locard, Mathieu Orfila, Francis Galton, Edwin Henry, and Alec Jeffreys.

(7) The student analyzes legal aspects within forensic science. The student is expected to:

(A) summarize the ethical standards required of a forensic science professional;

(B) identify and explain knowledge of terminology and procedures employed in the criminal justice system as they pertain to the chain of custody procedure for evidence;

(C) identify and explain knowledge of terminology and procedures employed in the criminal justice system as they pertain to expert witness testimony;

(D) research and discuss the effect of biases such as confirmation bias and framing cognitive bias on evidence collection, forensic analysis, and expert testimony; and

(E) compare the admissibility of expert witness testimony in terms of the Frye Standard and the Daubert Standard under federal rules of evidence.

(8) The student explores career options within forensic science. The student is expected to:

(A) explore and describe discipline-specific requirements for careers in forensic science, including collegiate course requirements, licensure, certifications, and physical and mental capabilities;

(B) differentiate the roles and responsibilities of professionals in the criminal justice system, including forensic scientists, crime scene investigators, criminologists, court systems personnel, and medicolegal death investigations; and

(C) differentiate the functions of various forensic science disciplines such as forensic biology, forensic chemistry, trace ev-

idence, ballistics, fingerprints, digital forensics, and questioned documents.

(9) The student recognizes the procedures of crime scene investigation while maintaining scene integrity. The student is expected to:

(A) explain the roles and tasks needed to complete a crime scene examination, which may require collaboration with outside experts and agencies, and demonstrate the ability to work as a member of a crime scene team;

(B) develop a detailed, technical written record based on observations and activities, documenting the crime scene examination;

(C) discuss the elements of criminal law that guide search and seizure of persons, property, and evidence;

(D) conduct a primary and secondary systematic search of a simulated crime scene for physical evidence utilizing search patterns such as spiral, line, grid, and zone;

(E) document a crime scene using photographic or audiovisual equipment;

(F) generate a physical or digital crime scene sketch, including coordinates or measurements from fixed points, compass directions, scale of proportion, legend-key, heading, and title block; and

(G) demonstrate proper techniques for collecting, packaging, and preserving physical evidence found at a crime scene while maintaining documentation, including chain of custody.

(10) The student analyzes fingerprint evidence in forensic science. The student is expected to:

(A) compare the three major fingerprint patterns of arches, loops, and whorls;

(B) identify the minutiae of fingerprints, including bifurcations, ending ridges, dots, short ridges, and enclosures/islands;

(C) distinguish between patent, plastic, and latent impressions;

(D) perform procedures for developing and lifting latent prints on nonporous surfaces using cyanoacrylate and fingerprint powders;

(E) perform procedures for developing latent prints using chemical processes on porous and adhesive surfaces with chemicals such as ninhydrin and crystal violet and documenting the results via photography; and

(F) explain the Integrated Automated Fingerprint Identification System (IAFIS) and describe the implications of Next Generation Identification (NGI) systems.

(11) The student collects and analyzes impression evidence in forensic science. The student is expected to:

(A) analyze the class and individual characteristics of tool mark impressions and the recovery and documentation of surface characteristics such as wood or metal;

(B) analyze the class and individual characteristics of footwear impressions and the recovery and documentation of surface characteristics such as soil or organic plant material;

(C) analyze the class and individual characteristics of tire tread impressions and the recovery documentation of surface characteristics such as soil or organic plant material; and

(D) compare impression evidence collected at a simulated crime scene with the known impression.

(12) The student recognizes the methods to process and analyze hair and fibers found in a crime scene. The student is expected to:

(A) demonstrate how to collect hair and fiber evidence at a simulated crime scene;

(B) perform the analysis of hair and fiber evidence using methods such as microscopy and flame testing;

(C) compare the microscopic characteristics of human hair and non-human hair, including medulla, pigment distribution, and scales;

(D) describe and illustrate the different microscopic characteristics used to determine the origin of a human hair sample; and

(E) differentiate between natural and synthetic fibers.

(13) The student recognizes the methods to process and analyze glass evidence. The student is expected to:

(A) demonstrate how to collect and preserve glass evidence;

(B) compare the composition of various types of glass such as soda lime, borosilicate, leaded, and tempered;

(C) determine the direction of a projectile by examining glass fractures; and

(D) define refractive index and explain how it is used in forensic glass analysis.

(14) The student explores principles of questioned document analysis in the physical and digital form. The student is expected to:

(A) research and explain different types of examinations performed on digital and physical evidence in a forensic laboratory such as digital data recovery, counterfeiting, ink, and paper analysis;

(B) investigate and describe the security features incorporated in U.S. and foreign currency to prevent counterfeiting; and

(C) perform handwriting comparisons of an unknown sample with exemplars by analyzing characteristics such as letter, line, and formatting.

(15) The student evaluates firearms and ballistics evidence. The student is expected to:

(A) describe the mechanism of modern firearms such as long guns and handguns;

(B) identify the components and characteristics of bullet and cartridge cases;

(C) describe the composition of and method of analysis for gunshot residue and primer residue;

(D) conduct and calculate trajectory analysis of bullet strikes within a simulated crime scene; and

(E) identify and recognize the type of information available through the National Integrated Ballistics Information Network.

(16) The student identifies controlled and illicit substances. The student is expected to:

(A) differentiate between toxicological analysis and controlled substance analysis as they relate to the method of collection and impact on the body;

(B) classify controlled substances using the schedules under the Controlled Substances Act; and

(C) identify unknown substances using presumptive and confirmatory procedures such as microchemical/color indicating reagent field tests, microscopy, chromatography, and spectrophotometry.

(17) The student explores toxicology in forensic science. The student is expected to:

(A) explain the absorption, distribution, metabolism, and elimination of toxins such as alcohol, prescription drugs, controlled substances, and carbon monoxide through the human body;

(B) describe presumptive and confirmatory laboratory procedures as they relate to toxicological analysis such as head space analysis, solid-phase extractions, gas chromatography-mass spectrometry (GC/MS), color tests, and immunoassays;

(C) interpret results from presumptive and confirmatory laboratory procedures, including GC/MS and their implications; and

(D) explain the precautions necessary in the forensic laboratory for proper preservation of biological samples.

(18) The student analyzes blood spatter at a simulated crime scene. The student is expected to:

(A) analyze blood stain patterns based on surface type and appearance such as size, shape, distribution and location in order to determine the mechanism by which the patterns are created;

(B) explain the methods of chemically enhancing latent blood patterns using reagents such as Blue Star or Amido Black; and

(C) conduct and interpret blood presumptive tests for various biologicals such as phenolphthalein and tetramethylbenzidine (TMB).

(19) The student analyzes the foundations and methodologies surrounding the processing of biological evidence for the purpose of identification. The student is expected to:

(A) identify different types of biological samples and practice proper collection and preservation techniques;

(B) identify the red blood cell antigens and antibodies as they relate to human blood types;

(C) describe the structure of a deoxyribonucleic acid (DNA) molecule and its function;

(D) explain the analytical procedure for generating a DNA profile, including extraction, quantification, amplification, and capillary electrophoresis;

(E) explain the different methodologies surrounding the different types of DNA analysis such as short tandem repeats (STRs), Y-STRs, mitochondrial DNA, and single nucleotide polymorphisms (SNPs);

(F) interpret the components of an electropherogram; and

(G) explore the databasing systems associated with DNA such as Combined DNA Index System (CODIS) and ancestry-based databasing systems.

(20) The student explores the principles surrounding medicolegal death investigations. The student is expected to:

(A) explain the principles of rigor, algor, and livor mortis and how they apply to deceased persons;

(B) differentiate between the types of wound patterns such as lacerations and blunt force trauma resulting from stabbings, bludgeoning, gunshots, and strangulations;

(C) determine cause and manner of death from an autopsy report obtained through resources such as case studies, simulated autopsies, and dissections; and

(D) determine the approximate time of death using entomology.

(21) The student explores principles of anthropology and odontology relevant to forensic science. The student is expected to:

(A) identify the major bones of the human skeletal system;

(B) compare composition and structure of human and non-human bones;

(C) describe the collection and preservation methods for bone evidence;

(D) explain the characteristics of the human skeletal system indicative of specific biological sex and approximate range of age and height; and

(E) explain how human remains are identified through dental records such as dentures, x-rays, and implants.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

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For further information, please call: (512) 475-1497



SUBCHAPTER O. SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

19 TAC §§127.778 - 127.782, 127.785 - 127.791

STATUTORY AUTHORITY. The new sections are proposed under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to by rule identify the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which allows the SBOE to by rule develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum required in TEC,

§28.002; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE by rule to determine the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; TEC, §28.025(b-2), which requires the SBOE by rule to allow a student to comply with the curriculum requirements for the third and fourth mathematics credits under TEC, §28.025(b-1)(2), or the third and fourth science credits under TEC, §28.025(b-1)(3), by successfully completing a CTE course designated by the SBOE as containing substantially similar and rigorous content; and TEC, §28.025(b-17), which requires the SBOE by rule to ensure that a student may comply with curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a), (b-2) and (b-17).

§127.778. *Principles of Bioscience (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) Principles of Bioscience provides an overview of biotechnology, bioengineering, and related fields. Topics related to genetics, proteins, and nucleic acids reinforce the applications of Biology content. Students will further study the increasingly important agricultural, environmental, economic, and political roles of bioenergy and biological remediation; the roles of nanoscience and nanotechnology in biotechnology medical research; and future trends in biological science and biotechnology.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;

(B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;

(C) present written and oral communication in a clear, concise, and effective manner;

(D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and

(E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

(2) The student explores biotechnology career opportunities. The student is expected to:

(A) determine interests in the field of biotechnology through explorations such as career assessments, interactions with biotechnology professionals, media, and literature;

(B) identify career options in the field of biotechnology;

(C) identify reliable sources of career information;

(D) research and communicate interests, knowledge, educational level, abilities, and skills needed in a biotechnology-related occupation;

(E) identify conventional and non-conventional career opportunities that match interests and aptitudes;

(F) research applications of biotechnology in medicine, the environment, and settings such as pharmaceutical, agricultural, and industrial;

(G) use technology to research biotechnology topics, including identifying and selecting appropriate scholarly references; and

(H) analyze and discuss professional publications such as academic and peer-reviewed journals and technical reports.

(3) The student evaluates ethical and legal issues in biotechnology. The student is expected to:

(A) identify current ethical and legal issues;

(B) describe the history of biotechnology and related ethical and legal issues;

(C) discuss legal and technology issues for at least two biotechnology-related areas; and

(D) analyze examples of biotechnology views supported by objective and subjective sources such as scientific data, economic data, and sociocultural contexts.

(4) The student examines federal, state, local, and industry regulations as applied to biotechnological processes through researching credible sources. The student is expected to:

(A) identify local, state, and federal agencies responsible for regulating the biotechnology industry such as the U.S. Department of Agriculture (USDA), the Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), and the Centers for Disease Control and Prevention (CDC);

(B) identify professional organizations participating in the development of biotechnology policies;

(C) identify and define terms related to biotechnology regulations such as Good Laboratory Practices (GLP), Good Manufacturing Practices (GMP), and Globally Harmonized System (GHS); and

(D) outline the methods and procedures used in biotechnology laboratories to follow local, state, and federal regulations such as those in the agricultural and health areas.

(5) The student demonstrates knowledge of the business climate for biotechnology industry sectors in the current market. The student is expected to:

- (A) identify professional publications;
- (B) identify the various biotechnology industry sectors;
- (C) investigate and report on career opportunities in the biotechnology industry sectors; and
- (D) identify professional organizations such as those at the local, state, and national levels.

(6) The student researches and exhibits employability skills that support a career in the biotechnology industry. The student is expected to:

- (A) demonstrate verbal, non-verbal, written, and electronic communication skills;
- (B) demonstrate skills used to secure and maintain employment;
- (C) demonstrate appropriate workplace etiquette;
- (D) display productive work habits and attitudes; and
- (E) identify appropriate safety equipment and practices as outlined in Texas Education Agency-approved and industry-approved safety standards such as the use of personal protective equipment (PPE) and safety data sheets (SDS).

(7) The student investigates how biotechnology impacts the origins of waste and resource recovery. The student is expected to:

- (A) identify biotechnology manufacturing processes and their end products, including waste and marketable products;
- (B) explore the impacts of waste on biotic and abiotic factors in the environment such as effects on biological life cycles and pollution from nonbiodegradable single-use materials and microplastics;
- (C) analyze the results of manufacturing refuse;
- (D) explain the negative impacts of waste with respect to the individual, society, and the global population;
- (E) investigate solutions to waste through bioremediation; and
- (F) investigate evidence supporting waste management through regulations, public policy, and technology development.

(8) The student examines the relationship of biotechnology to the development of commercial products. The student is expected to:

- (A) identify applications of agricultural biotechnology such as selective breeding of livestock and plants, aquaculture, horticultural products, and genetically modified organisms;
- (B) identify applications of industrial biotechnology such as fermented food and beverages, genetically engineered proteins for industry, biocatalysts, bio polymers, biosensors, bioremediation, and biofuels;
- (C) identify applications of medical and pharmaceutical biotechnology such as genetically modified cells, antibodies, vaccine and gene therapy, genetic testing for human disease/disorders, three-dimensional bio-printing, and medicines from plants, animals, fungi, and bacteria;

(D) identify applications of research and development in biotechnology such as deoxyribonucleic acid (DNA) and protein synthesis and sequencing, genetic testing and screening, DNA identification, RNAi, siRNA, miRNA, the CRISPR/Cas9 system, and synthetic biology;

(E) identify the applications of biotechnology in the fields of forensics, law enforcement, nanotechnology, and bioinformatics;

(F) research ethical considerations, laws, and regulations for biotechnological applications such as bioinformatics, genetic engineering, and nanotechnology; and

(G) identify the function of laboratory equipment, including a microscope, thermocycler, pH meter, hot plate stirrer, electronic balance, autoclave, centrifuge, transilluminator, micropipette, incubator, electrophoresis unit, vortex mixer, water bath, laboratory glassware, biosafety cabinet, and chemical fume hood.

§127.779. *Biotechnology I (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: one credit in biology. Recommended prerequisites: Principles of Bioscience and one credit in chemistry. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) In Biotechnology I, students will apply advanced academic knowledge and skills to the emerging fields of biotechnology such as agricultural, medical, regulatory, and forensics. Students will have the opportunity to use sophisticated laboratory equipment, perform statistical analysis, and practice quality-control techniques. Students will conduct laboratory and field investigations and make informed decisions using critical thinking, scientific problem solving, and the engineering design process. Students in Biotechnology I will study a variety of topics that include structures and functions of cells, nucleic acids, proteins, and genetics.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;

(B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;

(C) present written and oral communication in a clear, concise, and effective manner;

(D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and

(E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as microscopes, thermocyclers, pH meters, hot plate stirrers, glass bulb thermometers, timing devices, electronic balances, vortex mixers, autoclaves, micropipettes, centrifuges, gel and capillary electrophoresis units, cameras, data collection probes, spectrophotometers, transilluminators, incubators, water baths, laboratory glassware, biosafety cabinets, and chemical fume hoods;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using laboratory notebooks, written lab reports, graphs, charts, tables, digital tools, diagrams, scientific drawings, and student-prepared models;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.

(6) The student explores the emerging field of biotechnology. The student is expected to:

(A) define biotechnology and provide examples of biotechnology products such as recombinant proteins, fermented foods, biopharmaceuticals, and genetically modified foods;

(B) compare applications of bioinformatics such as deoxyribonucleic acid (DNA) barcoding, sequencing, National Center for Biotechnology Information (NCBI) tools, ClinVar, Genemonon Mastermind, genetic testing, phylogenetic relationships, and the use of online databases;

(C) research and identify career opportunities in genetics, bioinformatics, and in fields such as molecular, forensic, medical, regulatory, and agricultural biotechnology;

(D) identify significant contributions of diverse scientists to biotechnology and explain their impact on society;

(E) define bioethics and evaluate the applications of bioethics;

(F) evaluate different points of view about issues and current events in biotechnology;

(G) identify applications in agricultural biotechnology such as genetically modified organisms (GMOs), plant propagation from tissue culturing, and aquaculture hydroponics;

(H) identify applications in medical biotechnology such as vaccines production, stem cells therapy, gene therapy, pharmaceutical production, pharmacogenetics, genomics, synthetic biology, and personalized medicine;

(I) identify applications in forensic biotechnology such as capillary electrophoresis, real-time polymerase chain reaction, DNA fingerprinting, restriction fragment length polymorphisms (RFLP) analysis, toxicology, and serology; and

(J) identify solutions to waste through bioremediation and non-biotechnological standard solutions such as landfills, incineration, absorbent materials, and catalytic materials.

(7) The student summarizes biotechnology laboratory procedures and their applications in the biotechnology industry. The student is expected to:

(A) identify the major sectors of the biotechnology industry such as medical and pharmaceutical, agricultural, industrial, forensic, and research and development;

(B) identify the biotechnology laboratory procedures used in each sector such as selective breeding, genetic engineering, DNA analysis, and protein analysis; and

(C) compare and contrast the different applications used in biotechnology laboratory procedures of each sector.

(8) The student understands the role of genetics in the biotechnology industry. The student is expected to:

(A) explain terms related to molecular biology, including nucleic acids, nitrogen bases, nucleotides, mRNA, rRNA, tRNA, ribosomes, amino acids, transcription, translation, polymerase, and protein synthesis;

(B) compare and contrast the structures and functions of DNA and ribonucleic acid (RNA), including nitrogen bases, nucleotides, the helical nature of DNA, and hydrogen bonding between purines and pyrimidines;

(C) distinguish between nuclear and mitochondrial DNA and their gamete sources;

(D) describe the DNA replication process in eukaryotic and prokaryotic cells, including leading and lagging strands and Okazaki fragments;

(E) illustrate the process of protein synthesis, including ribosomal subunits and the role of tRNA;

(F) describe the structures and functions of proteins, including three-dimensional folding, enzymes, and antibodies;

(G) explain the molecular structures of genes, including enhancers, promoters, exons, introns, and coding regions;

(H) describe the different types of mutations, including inversions, deletions, duplications, and substitutions;

(I) explain the effects of mutation types on phenotype and gene function; and

(J) describe unique elements of the molecular structure of a chromosome such as short tandem repeats (STR), transposons, and methylation and acetylation of DNA.

(9) The student analyzes the importance of recombinant DNA technology and genetic engineering. The student is expected to:

(A) describe the fundamental steps in recombinant DNA technology;

(B) explain how recombinant DNA technology such as nuclear transfer cloning is used to clone genes and create recombinant proteins;

(C) explain the role of tissue cultures in genetic modification procedures;

(D) describe plant- and animal-tissue culture procedures;

(E) compare and contrast growing conditions for plant and animal tissue cultures;

(F) explain the role of restriction enzymes; and

(G) distinguish between vectors commonly used in biotechnology for DNA insertion, including plasmids, adenoviruses, retroviruses, and bacteriophages.

(10) The student examines federal, state, local, and industry regulations as related to biotechnology. The student is expected to:

(A) discuss the relationship between the local, state, and federal agencies responsible for regulation of the biotechnology industry such as the U.S. Department of Agriculture (USDA), the Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), and the Centers for Disease Control and Prevention (CDC); and

(B) analyze policies and procedures used in the biotechnology industry such as quality assurance, standard operating procedures (SOPs), Good Manufacturing Practices (GMPs), and International Organization for Standardization (ISO) quality systems.

(11) The student performs biotechnology laboratory procedures. The student is expected to:

(A) measure volumes and weights to industry standards with accuracy and precision;

(B) analyze data and perform calculations and statistical analysis as it relates to biotechnology laboratory experiments;

(C) demonstrate proficiency in pipetting techniques;

(D) identify microorganisms using staining methods such as the Gram stain, methylene-blue stain, and acid-fast staining;

(E) prepare a restriction digest, isolate nucleic acids, and evaluate results using techniques such as gel and capillary electrophoresis, Northern blot analysis, and Southern blot analysis;

(F) explain the importance of media components to the outcome of cultures;

(G) isolate, maintain, and store microbial cultures safely;

(H) prepare seed inoculum; and

(I) perform plating techniques such as streak plating, spread plating, and the Kirby-Bauer method.

(12) The student prepares solutions and reagents for the biotechnology laboratory. The student is expected to:

(A) demonstrate aseptic techniques for establishing and maintaining a sterile work area;

(B) prepare, dispense, and monitor physical properties of stock reagents, buffers, media, and solutions;

(C) calculate and prepare a dilution series; and

(D) determine optimum conditions of reagents for experimentation.

(13) The student conducts quality-control analysis while performing biotechnology laboratory procedures. The student is expected to:

(A) perform validation testing on laboratory reagents and equipment; and

(B) analyze data and perform calculations and statistical analysis on results of quality-control samples.

§127.780. *Biotechnology II (One Credit), Adopted 2021.*

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Biotechnology I and one credit in chemistry. shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-rele-

vant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) Biotechnology II has the components of any rigorous scientific or bioengineering program of study. This course applies the standard skills mastered in Biotechnology I and includes additional skills related to assay design, protein analysis, applications of genetic engineering, and quality management. After taking this course, students should be prepared for entry-level lab technician jobs.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy

occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;

(B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;

(C) present written and oral communication in a clear, concise, and effective manner;

(D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and

(E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as microscopes, thermocyclers, pH meters, hot plate stirrers, glass bulb thermometers, timing devices, electronic balances, vortex mixers, autoclaves, micropipettes, centrifuges, gel and capillary electrophoresis units, cameras, data collection probes, spectrophotometers, transilluminators, incubators, water baths, laboratory glassware, biosafety cabinets, and chemical fume hoods;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using laboratory notebooks, written lab reports, graphs, charts, tables, digital tools, diagrams, scientific drawings, and student-prepared models;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.

(6) The student prepares for an entry-level career in biotechnology. The student is expected to:

(A) research and identify career opportunities in genetics, bioinformatics, and fields such as molecular, forensic, medical, regulatory, and agricultural biotechnology;

(B) identify the significance of recent advances in molecular, forensic, medical, regulatory, and agricultural biotechnology;

(C) discuss current bioethical issues related to the field of biotechnology;

(D) create a job-specific resume; and

(E) develop a career plan.

(7) The student analyzes academic and professional journals and technical reports. The student is expected to:

(A) identify the scientific methodology used by a researcher;

(B) examine a prescribed research design and identify dependent and independent variables;

(C) evaluate a prescribed protocol to determine the purpose for each of the procedures performed; and

(D) interpret data and evaluate conclusions.

(8) The student explores assay design in the field of biotechnology. The student is expected to:

(A) define assay requirements and optimizations;

(B) perform statistical analysis on assay design and experimental data such as linearity, system sustainability, limit of detection, and R2 values;

(C) determine an unknown protein concentration using a standard curve and technique such as a Bradford assay; and

(D) evaluate enzyme kinetics using a colorimetric assay.

(9) The student explores applications related to protein expression in the field of biotechnology. The student is expected to:

(A) describe the fundamental steps in recombinant deoxyribonucleic acid (DNA) technology;

(B) produce a recombinant protein such as green fluorescent protein (GFP);

(C) analyze proteins using techniques such as enzyme-linked immunosorbent assay (ELISA), spectrophotometry, and sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE); and

(D) isolate a specific protein from a biological sample using techniques such as chromatography and Western blot analysis.

(10) The student explores applications of recombinant DNA technology and genetic engineering. The student is expected to:

(A) prepare and maintain tissue cultures commonly used in genetic modification procedures;

(B) evaluate the effects of changes to growing conditions such as pH, temperature, and growth media;

(C) evaluate the results of a bacterial transformation using a restriction enzyme digest and Southern blot analysis;

(D) compare and contrast vectors commonly used in biotechnology applications, including plasmids, adenoviruses, retroviruses, and bacteriophages;

(E) explain the steps and components of the polymerase chain reaction (PCR); and

(F) explain applications of CRISPR/Cas9 technology in gene editing and diagnostics.

(11) The student prepares solutions and reagents for the biotechnology laboratory. The student is expected to:

(A) demonstrate aseptic techniques for establishing and maintaining a sterile work area;

(B) prepare, dispense, and monitor physical properties of stock reagents, buffers, media, and solutions;

(C) calculate and prepare a dilution series;

(D) determine acceptability and optimum conditions of reagents for experimentation; and

(E) prepare multi-component solutions of given molarity or concentration and volume.

(12) The student investigates the role of quality in the biotechnology industry. The student is expected to:

(A) describe the product pipeline in the biotechnology industry;

(B) describe the importance of quality assurance and quality control;

(C) explain the importance of documentation to quality assurance and quality control;

(D) describe the importance of corrective and preventive action (CAPA);

(E) describe Quality Management Systems (QMS) components, including inspection, audit, surveillance, and prevention;

(F) describe Good Manufacturing Practices (GMP), Good Clinical Practices (GCP), Good Documentation Practices (GDP), Good Lab Practices (GLP), and International Organization for Standardization (ISO);

(G) perform validation testing on laboratory reagents and equipment;

(H) analyze data and perform calculations and statistical analysis on results of quality-control samples such as standard deviation and percent error; and

(I) apply and create industry protocols such as laboratory method protocols, standard operating procedures (SOPs), and validation forms.

§127.781. Principles of Applied Engineering (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.

(3) Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. Upon completing this course, students will have an understanding of the various fields of engineering and be able to make informed career decisions.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession;

(B) cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;

(C) present written and oral communication in a clear, concise, and effective manner;

(D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and

(E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks.

(2) The student investigates the components of engineering and technology systems. The student is expected to:

(A) investigate and report on the history of engineering disciplines, including chemical, civil, electrical, and mechanical engineering;

(B) identify the inputs, processes, and outputs associated with technological systems;

(C) describe the difference between open and closed systems;

(D) describe how technological systems interact to achieve common goals;

(E) compare engineering, science, and technology career paths, including entry-level employment, military service, apprenticeships, community and technical colleges, and universities;

(F) conduct and present research on emerging and innovative technology; and

(G) demonstrate proficiency of the engineering design process.

(3) The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:

(A) use clear and concise written, verbal, and visual communication techniques;

(B) maintain a design and computation engineering notebook;

(C) develop and present ideas using sketching and computer-aided design and drafting (CADD);

(D) draw conclusions using industry-standard visualization techniques and media;

(E) maintain a paper or digital portfolio using the engineering documentation process; and

(F) use collaborative tools such as desktop or web-based applications to share and develop information.

(4) The student uses appropriate tools and demonstrates safe work habits. The student is expected to:

(A) master relevant safety tests;

(B) follow lab safety guidelines as prescribed by instructor in compliance with local, state, and federal regulations;

(C) identify industry safety terminology related to the personal work environment such as Occupational Safety and Health Administration (OSHA), American Society of Mechanical Engineers (ASME), and personal protective equipment (PPE);

(D) recognize the classification of hazardous materials and wastes;

(E) describe appropriate ways to dispose of hazardous materials and wastes;

(F) maintain, safely handle, and properly store laboratory equipment;

(G) describe the implications of negligent or improper maintenance; and

(H) demonstrate the use of precision measuring instruments.

(5) The student describes the factors that affect the progression of technology and analyzes the potential intended and unintended consequences of technological advances. The student is expected to:

(A) describe how technology has affected individuals, societies, cultures, economies, and environments;

(B) describe how the development and use of technology influenced past events;

(C) describe how and why technology progresses; and

(D) predict possible changes caused by the advances of technology.

(6) The student thinks critically and applies fundamental principles of system modeling and design to multiple design projects. The student is expected to:

(A) identify and describe an engineering design process needed for a project, including the design process and prototype development and initiating, planning, executing, monitoring and controlling, and closing a project;

(B) identify the chemical, mechanical, and physical properties of engineering materials and identify testing methods associated with the materials;

(C) use problem-solving techniques to develop technological solutions such as product, process, or system;

(D) use consistent units for all measurements and computations; and

(E) assess the risks and benefits of a design solution.

(7) The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:

(A) describe applications of robotics, process control, and automation systems;

(B) apply design concepts to problems in robotics, process control, and automation systems;

(C) identify fields and career opportunities related to robotics, process control, and automation systems; and

(D) identify emerging trends in robotics, process control, and automation systems.

(8) The student understands the opportunities and careers in fields related to electrical and mechanical systems. The student is expected to:

(A) describe the applications of electrical and mechanical systems;

(B) describe career opportunities in electrical and mechanical systems;

(C) identify emerging trends in electrical and mechanical systems; and

(D) describe and apply basic electronic theory.

(9) The student collaborates as a team member while completing a comprehensive project. The student is expected to:

(A) apply the design process, including decision matrices, as a team participant;

(B) perform different roles within the project as a team member;

(C) formulate decisions using collaborative strategies such as decision and design matrices and conflict resolution;

(D) maintain an engineering notebook for the project;

(E) develop and test the model for the project; and

(F) demonstrate communication skills by preparing and presenting the project, including building consensus, setback resolution and decision matrices.

(10) The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:

(A) set up, create, and modify drawings;

(B) store and retrieve geometry;

(C) demonstrate and use appropriate line types in engineering drawings;

(D) draw two-dimensional, single-view objects;

(E) create multi-view working drawings using orthographic projection;

(F) dimension objects using current American National Standards Institute (ANSI) standards;

(G) draw single-line two-dimensional pictorial representations; and

(H) create working drawings that include section views.

(11) The student creates justifiable solutions to open-ended real-world problems using engineering design practices and processes. The student is expected to:

(A) identify and define an engineering problem;

(B) formulate goals, objectives, and requirements to solve an engineering problem;

(C) determine the design parameters such as materials, personnel, resources, funding, manufacturability, feasibility, and time associated with an engineering problem;

(D) establish and evaluate potential constraints, including health, safety, social, environmental, ethical, political, regulatory, and legal, pertaining to a problem;

(E) identify or create alternative solutions to a problem using a variety of techniques such as brainstorming, reverse engineering, and researching engineered and natural solutions;

(F) test and evaluate proposed solutions using methods such as creating models, prototypes, mock-ups, or simulations or performing critical design review, statistical analysis, or experiments;

(G) apply structured techniques such as a decision tree, design matrix, or cost-benefit analysis to select and justify a preferred solution to a problem;

(H) predict performance, failure modes, and reliability of a design solution; and

(I) prepare a project report that clearly documents the designs, decisions, and activities during each phase of the engineering design process.

§127.782. Engineering Science (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Algebra I and one credit in biology. Recommended prerequisite: Geometry, Integrated Physics and Chemistry (IPC), one credit in chemistry, or one credit in physics. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.

(3) Engineering Science is an engineering course designed to expose students to some of the major concepts and technologies that they will encounter in a postsecondary program of study in any engineering domain. Students will have an opportunity to investigate engineering and high-tech careers. In Engineering Science, students will employ science, technology, engineering, and mathematical concepts in the solution of real-world challenge situations. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(5) Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(6) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(7) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(8) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(9) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(10) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;

(B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;

(C) present written and oral communication in a clear, concise, and effective manner;

(D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and

(E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as dial caliper, micrometer, protractor, compass, scale rulers, multimeter, and circuit components;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using spreadsheets, engineering notebooks, graphs, and charts;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.

(6) The student investigates engineering-related fields and career opportunities. The student is expected to:

(A) differentiate between engineering and engineering technology;

(B) compare the roles or job descriptions for career opportunities in the fields of pure science, engineering, and engineering technology;

(C) identify and differentiate between the different engineering disciplines; and

(D) demonstrate appropriate oral, written, and visual forms of technical communication.

(7) The student demonstrates an understanding of design problems and works individually and as a member of a team to solve design problems. The student is expected to:

(A) solve design problems individually and in a team;

(B) create solutions to existing problems using a design process;

(C) use a design brief to identify problem specifications and establish project constraints;

(D) use communication to achieve a desired goal within a team; and

(E) work as a member of a team to conduct research to develop a knowledge base, stimulate creative ideas, and make informed decisions.

(8) The student understands mechanisms, including simple and compound machines, and performs calculations related to mechanical advantage, drive ratios, work, and power. The student is expected to:

(A) explain the purpose and operation of components, including gears, sprockets, pulley systems, and simple machines;

(B) explain how components, including gears, sprockets, pulley systems, and simple machines, make up mechanisms;

(C) distinguish between the six simple machines and their attributes and components;

(D) measure forces and distances related to a mechanism;

(E) calculate work and power in mechanical systems;

(F) determine experimentally the efficiency of mechanical systems; and

(G) calculate mechanical advantage and drive ratios of mechanisms.

(9) The student understands energy sources, energy conversion, and circuits and performs calculations related to work and power. The student is expected to:

(A) identify and categorize energy sources as nonrenewable, renewable, or inexhaustible;

(B) define and calculate work and power in electrical systems;

(C) calculate and explain how power in a system converts energy from electrical to mechanical; and

(D) define voltage, current, and resistance and calculate each quantity in series, parallel, and combination electrical circuits using Ohm's law.

(10) The student understands system energy requirements and how energy sources can be combined to convert energy into useful forms. The student understands the relationships between material conductivity, resistance, and geometry in order to calculate energy transfer and determine power loss and efficiency. The student is expected to:

(A) explain the purpose of energy management;

(B) evaluate system energy requirements in order to select the proper energy source;

(C) explain and design how multiple energy sources can be combined to convert energy into useful forms;

(D) describe how hydrogen fuel cells create electricity and heat and how solar cells create electricity;

(E) measure and analyze how thermal energy is transferred via convection, conduction, and radiation;

(F) analyze how thermal energy transfer is affected by conduction, thermal resistance values, convection, and radiation; and

(G) calculate resistance, efficiency, and power transfer in power transmission and distribution applications for various material properties.

(11) The student understands the interaction of forces acting on a body and performs calculations related to structural design. The student is expected to:

(A) illustrate, calculate, and experimentally measure all forces acting upon a given body;

(B) locate the centroid of structural members mathematically or experimentally;

(C) calculate moment of inertia of structural members;

(D) define and calculate static equilibrium;

(E) differentiate between scalar and vector quantities;

(F) identify properties of a vector, including magnitude and direction;

(G) calculate the X and Y components given a vector;

(H) calculate moment forces given a specified axis;

(I) calculate unknown forces using equations of equilibrium; and

(J) calculate external and internal forces in a statically determinate truss using translational and rotational equilibrium equations.

(12) The student understands material properties and the importance of choosing appropriate materials for design. The student is expected to:

(A) conduct investigative non-destructive material property tests on selected common household products;

(B) calculate and measure the weight, volume, mass, density, and surface area of selected common household products; and

(C) identify the manufacturing processes used to create selected common household products.

(13) The student uses material testing to determine a product's function and performance. The student is expected to:

(A) use a design process and mathematical formulas to solve and document design problems;

(B) obtain measurements of material samples such as length, width, height, and mass;

(C) use material testing to determine a product's reliability, safety, and predictability in function;

(D) identify and calculate test sample material properties using a stress-strain curve; and

(E) identify and compare measurements and calculations of sample material properties such as elastic range, proportional limit, modulus of elasticity, elastic limit, resilience, yield point, plastic deformation, ultimate strength, failure, and ductility using stress-strain data points.

(14) The student understands that control systems are designed to provide consentient process control and reliability and uses computer software to create flowcharts and control system operating programs. The student is expected to:

(A) create detailed flowcharts using a computer software application;

(B) create control system operating programs using computer software;

(C) create system control programs that use flowchart logic;

(D) select appropriate input and output devices based on the need of a technological system; and

(E) judge between open- and closed-loop systems in order to select the most appropriate system for a given technological problem.

(15) The student demonstrates an understanding of fluid power systems and calculates values in a variety of systems. The student is expected to:

(A) identify and explain basic components and functions of fluid power devices;

(B) differentiate between pneumatic and hydraulic systems and between hydrodynamic and hydrostatic systems;

(C) use Pascal's Law to calculate values in a fluid power system;

(D) distinguish between gauge pressure and absolute pressure and between temperature and absolute temperature;

(E) calculate values in a pneumatic system using the ideal gas laws; and

(F) calculate and experiment with flow rate, flow velocity, and mechanical advantage in a hydraulic system model.

(16) The student demonstrates an understanding of statistics and applies the concepts to real-world engineering design problems. The student is expected to:

(A) calculate and test the theoretical probability that an event will occur;

(B) calculate the experimental frequency distribution of an event occurring;

(C) apply the Bernoulli process to events that only have two distinct possible outcomes;

(D) apply AND, OR, and NOT logic to solve complex probability scenarios;

(E) apply Bayes's theorem to calculate the probability of multiple events occurring;

(F) calculate the central tendencies of a data array, including mean, median, and mode;

(G) calculate data variations, including range, standard deviation, and variance; and

(H) create and explain a histogram to illustrate frequency distribution.

(17) The student demonstrates an understanding of kinematics in one and two dimensions and applies the concepts to real-world engineering design problems. The student is expected to:

(A) calculate distance, displacement, speed, velocity, and acceleration from data;

(B) calculate experimentally the acceleration due to gravity given data from a free-fall device;

(C) calculate the X and Y components of an object in projectile motion; and

(D) determine and test the angle needed to launch a projectile a specific range given the projectile's initial velocity.

§127.785. Engineering Design and Problem Solving (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Algebra I and Geometry. Recommended prerequisites: two credits from the Science, Technology, Engineering, and Mathematics (STEM) Career Cluster. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The STEM Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.

(3) The Engineering Design and Problem Solving course is the creative process of solving problems by identifying needs and then devising solutions. The solution may be a product, technique, structure, or process depending on the problem. Science aims to understand the natural world, while engineering seeks to shape this world to meet

human needs and wants. Engineering design takes into consideration limiting factors or "design under constraint." Various engineering disciplines address a broad spectrum of design problems using specific concepts from the sciences and mathematics to derive a solution. The design process and problem solving are inherent to all engineering disciplines.

(4) Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open-ended, with real-world application. Students will apply critical-thinking skills to justify a solution from multiple design options. Additionally, the course promotes interest in and understanding of career opportunities in engineering.

(5) This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems. Students use the engineering design process cycle to investigate, design, plan, create, and evaluate solutions. At the same time, this course fosters awareness of the social and ethical implications of technological development.

(6) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not currently scientifically testable.

(7) Scientific hypotheses and theories. Students are expected to know that:

(A) hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories; and

(B) scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well established and highly reliable explanations, but they may be subject to change as new areas of science and new technologies are developed.

(8) Scientific inquiry is the planned and deliberate investigation of the natural world using scientific and engineering practices. Scientific methods of investigation are descriptive, comparative, or experimental. The method chosen should be appropriate to the question being asked. Student learning for different types of investigations include descriptive investigations, which involve collecting data and recording observations without making comparisons; comparative investigations, which involve collecting data with variables that are manipulated to compare results; and experimental investigations, which involve processes similar to comparative investigations but in which a control is identified.

(A) Scientific practices. Students should be able to ask questions, plan and conduct investigations to answer questions, and explain phenomena using appropriate tools and models.

(B) Engineering practices. Students should be able to identify problems and design solutions using appropriate tools and models.

(9) Scientific decision making is a way of answering questions about the natural world involving its own set of ethical standards about how the process of science should be carried out. Students should

be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).

(10) Science consists of recurring themes and making connections between overarching concepts. Recurring themes include systems, models, and patterns. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested, while models allow for boundary specification and provide a tool for understanding the ideas presented. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

(11) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(12) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate knowledge of how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession;

(B) show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome;

(C) present written and oral communication in a clear, concise, and effective manner;

(D) demonstrate time-management skills in prioritizing tasks, following schedules, and performing goal-relevant activities in a way that produces efficient results; and

(E) demonstrate punctuality, dependability, reliability, and responsibility in performing assigned tasks as directed.

(2) The student, for at least 40% of instructional time, asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;

(B) apply scientific practices to plan and conduct descriptive, comparative, and experimental investigations and use engineering practices to design solutions to problems;

(C) use appropriate safety equipment and practices during laboratory, classroom, and field investigations as outlined in Texas Education Agency-approved safety standards;

(D) use appropriate tools such as dial caliper, micrometer, protractor, compass, scale rulers, multimeter, and circuit components;

(E) collect quantitative data using the International System of Units (SI) and United States customary units and qualitative data as evidence;

(F) organize quantitative and qualitative data using spreadsheets, engineering notebooks, graphs, and charts;

(G) develop and use models to represent phenomena, systems, processes, or solutions to engineering problems; and

(H) distinguish between scientific hypotheses, theories, and laws.

(3) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:

(A) identify advantages and limitations of models such as their size, scale, properties, and materials;

(B) analyze data by identifying significant statistical features, patterns, sources of error, and limitations;

(C) use mathematical calculations to assess quantitative relationships in data; and

(D) evaluate experimental and engineering designs.

(4) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:

(A) develop explanations and propose solutions supported by data and models and consistent with scientific ideas, principles, and theories;

(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and

(C) engage respectfully in scientific argumentation using applied scientific explanations and empirical evidence.

(5) The student knows the contributions of scientists and engineers and recognizes the importance of scientific research and innovation on society. The student is expected to:

(A) analyze, evaluate, and critique scientific explanations and solutions by using empirical evidence, logical reasoning, and experimental and observational testing so as to encourage critical thinking by the student;

(B) relate the impact of past and current research on scientific thought and society, including research methodology, cost-benefit analysis, and contributions of diverse scientists and engineers as related to the content; and

(C) research and explore resources such as museums, libraries, professional organizations, private companies, online platforms, and mentors employed in a STEM field.

(6) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:

(A) communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles, and marketing materials; and

(B) draw inferences based on data related to promotional materials for products and services.

(7) The student applies knowledge of science and mathematics and the tools of technology to solve engineering design problems. The student is expected to:

(A) select appropriate mathematical models to develop solutions to engineering design problems;

(B) integrate advanced mathematics and science skills as necessary to develop solutions to engineering design problems;

(C) judge the reasonableness of mathematical models and solutions;

(D) investigate and apply relevant chemical, mechanical, biological, electrical, and physical properties of materials to engineering design problems;

(E) identify the inputs, processes, outputs, control, and feedback associated with open and closed systems;

(F) describe the difference between open-loop and closed-loop control systems;

(G) evaluate different measurement tools such as dial caliper, micrometer, protractor, compass, scale rulers, and multimeter, make measurements with accuracy and precision, and specify tolerances; and

(H) use conversions between measurement systems to solve real-world problems.

(8) The student communicates through written documents, presentations, and graphic representations using the tools and techniques of professional engineers. The student is expected to:

(A) communicate visually by sketching and creating technical drawings using established engineering graphic tools, techniques, and standards;

(B) read and comprehend technical documents, including specifications and procedures;

(C) prepare written documents such as memorandums, emails, design proposals, procedural directions, letters, and technical reports using the formatting and terminology conventions of technical documentation;

(D) organize information for visual display and analysis using appropriate formats for various audiences, including technical drawings, graphs, and tables such as file conversion and appropriate file types, in order to collaborate with a wider audience;

(E) evaluate the quality and relevance of sources and cite appropriately; and

(F) defend a design solution in a presentation.

(9) The student recognizes the history, development, and practices of the engineering professions. The student is expected to:

(A) identify and describe career options, working conditions, earnings, and educational requirements of various engineering disciplines such as those listed by the Texas Board of Professional Engineers;

(B) recognize that engineers are guided by established codes emphasizing high ethical standards;

(C) explore the differences, similarities, and interactions between engineers, scientists, and mathematicians;

(D) describe how technology has evolved in the field of engineering and consider how it will continue to be a useful tool in solving engineering problems;

(E) discuss the history and importance of engineering innovation on the U.S. economy and quality of life; and

(F) describe the importance of patents and the protection of intellectual property rights.

(10) The student creates justifiable solutions to open-ended real-world problems using engineering design practices and processes. The student is expected to:

- (A) identify and define an engineering problem;
- (B) formulate goals, objectives, and requirements to solve an engineering problem;
- (C) determine the design parameters associated with an engineering problem such as materials, personnel, resources, funding, manufacturability, feasibility, and time;
- (D) establish and evaluate constraints pertaining to a problem, including health, safety, social, environmental, ethical, political, regulatory, and legal;
- (E) identify or create alternative solutions to a problem using a variety of techniques such as brainstorming, reverse engineering, and researching engineered and natural solutions;
- (F) test and evaluate proposed solutions using methods such as creating models, prototypes, mock-ups, or simulations or performing critical design review, statistical analysis, or experiments;
- (G) apply structured techniques to select and justify a preferred solution to a problem such as a decision tree, design matrix, or cost-benefit analysis;
- (H) predict performance, failure modes, and reliability of a design solution; and
- (I) prepare a project report that clearly documents the designs, decisions, and activities during each phase of the engineering design process.

(11) The student manages an engineering design project. The student is expected to:

- (A) participate in the design and implementation of a real-world or simulated engineering project using project management methodologies, including initiating, planning, executing, monitoring and controlling, and closing a project;
- (B) develop a plan and project schedule for completion of a project;
- (C) work in teams and share responsibilities, acknowledging, encouraging, and valuing contributions of all team members;
- (D) compare and contrast the roles of a team leader and other team member responsibilities;
- (E) identify and manage the resources needed to complete a project;
- (F) use a budget to determine effective strategies to meet cost constraints;
- (G) create a risk assessment for an engineering design project;
- (H) analyze and critique the results of an engineering design project; and
- (I) maintain an engineering notebook that chronicles work such as ideas, concepts, inventions, sketches, and experiments.

§127.786. Introduction to Computer-Aided Design and Drafting (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended Prerequisite: Principles of Applied Engineering, Principles of Architecture and Design, or Principles

of Manufacturing. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.

(3) Introduction to Computer-Aided Design and Drafting (CADD) allows students to acquire knowledge and skills needed to use design software, including an introduction to CADD equipment and software selection and interfaces. Students gain skills in setting up a CADD workstation; upgrading a computer to run advanced CADD software; working with storage devices; storing, retrieving, backing-up, and sharing databases, file servers, and local area networks (LANs); and transferring drawing files over the internet.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

- (A) describe the roles, responsibilities, and dynamics of a team as applied in appropriate industry fields;
- (B) explain employers' work expectations;
- (C) use effective and accurate architectural or engineering vocabulary throughout design and drafting process;
- (D) demonstrate knowledge of the concepts and skills related to health in the workplace; and
- (E) demonstrate safety in the workplace as specified by appropriate governmental regulations.

(2) The student demonstrates knowledge of the CADD software. The student is expected to:

- (A) describe computer-aided design, drafting, and CADD applications;
- (B) demonstrate how to start and exit CADD software without corrupting files;
- (C) use draw files;
- (D) save, close, and open saved files;
- (E) determine and specify drawing units and limits;
- (F) describe and use the Cartesian coordinate system;
- (G) use drawing snap and grid functions; and
- (H) demonstrate the use of dynamic input and the command line.

(3) The student demonstrates the use of CADD tools for basic drawing and plotting. The student is expected to:

- (A) draw objects using the line tool;
 - (B) draw circles, arcs, ellipses, and elliptical arcs;
 - (C) draw polylines, rectangles, donuts, and filled circles;
 - (D) draw true spline curves;
 - (E) create drawing templates;
 - (F) describe basic line conventions;
 - (G) create and manage layers;
 - (H) draw objects on separate layers;
 - (I) print and plot drawings;
 - (J) demonstrate organizational skills to influence the sequential process when creating drawings;
 - (K) construct geometric figures of lines, splines, circles, and arcs;
 - (L) create and edit text using appropriate style and size to annotate drawings;
 - (M) use control accuracy enhancement tools for entity positioning methods such as snap and xyz;
 - (N) use editing commands;
 - (O) use viewing commands to perform zooming and panning;
 - (P) plot drawings on media using layout and scale;
 - (Q) use query commands to interrogate database for entity characteristics, distance, area, and status;
 - (R) move, stretch, and offset objects;
 - (S) create a radius between objects;
 - (T) trim and extend objects;
 - (U) break and join objects;
 - (V) change object properties; and
 - (W) create hatching and manipulate properties such as calculating the area of an enclosed shape.
- (4) The student demonstrates the use of CADD tools display and viewpoints. The student is expected to:
- (A) create multiple viewpoints in the drawing window;
 - (B) select appropriate object snaps for various drawing tasks;
 - (C) create orthographic drawings;
 - (D) analyze challenges and identify solutions for design problems;
 - (E) investigate the use of space, scale, and environmental features to create three-dimensional form or the illusion of depth and form;
 - (F) prepare multi-view scaled drawings;
 - (G) select proper drawing scale, views, and layout;
 - (H) create drawings containing horizontal and vertical surfaces;

- (I) create drawings containing circles and arcs;
 - (J) create removed details and conventional breaks using sectional drawing techniques;
 - (K) create assembly drawings;
 - (L) create detail drawings; and
 - (M) create technical drawings and title blocks associated with the different CAD drawings.
- (5) The student demonstrates the use of software tools to properly create text within a CADD drawing. The student is expected to:
- (A) use proper text standards for technical drawings;
 - (B) calculate drawing scale and text height using a scale ratio;
 - (C) apply text styles to enhance readability of drawings;
 - (D) demonstrate the use of tools to create multi-line text objects and single-line text;
 - (E) edit existing text; and
 - (F) create, insert, and modify tables.
- (6) The student demonstrates the use of CADD editing tools within drawings. The student is expected to:
- (A) draw chamfers and fillets;
 - (B) use editing tools to modify existing drawings;
 - (C) edit polylines and splines;
 - (D) move and copy objects;
 - (E) create mirror images and align objects; and
 - (F) scale and array objects.
- (7) The student demonstrates the use of grips in drawings. The student is expected to:
- (A) apply grips to stretch, move, rotate, scale, mirror, and copy objects;
 - (B) demonstrate the use of Quick Properties and the Properties palette to access CADD tools; and
 - (C) create selections by using the Quick Select dialog box.
- (8) The student demonstrates the use of scale and dimension standards and practices. The student is expected to:
- (A) apply standard dimensioning rules;
 - (B) draw scales and dimensions;
 - (C) create, edit, and manage dimension styles;
 - (D) add linear and angular dimensions to a drawing;
 - (E) draw datum and chain dimensions;
 - (F) dimension circles and arcs;
 - (G) control the appearance of existing dimensions and dimension text; and
 - (H) change dimension line spacing and alignment.
- (9) The student creates and demonstrates standard blocks using tool palettes. The student is expected to:
- (A) create and save text information blocks;

- (B) insert blocks into a drawing;
- (C) edit and update a block in a drawing;
- (D) create blocks as a drawing file;
- (E) construct and use a symbol library of blocks; and
- (F) purge unused items from a drawing.

(10) The student prepares surface developments. The student is expected to:

- (A) prepare developments of prisms, cylinders, cones, and pyramids;
- (B) prepare developments of a transition piece; and
- (C) prepare drawings involving intersecting pieces.

(11) The student designs and prepares basic architectural drawings. The student is expected to:

- (A) solve design problems to gain new perspectives;
- (B) apply critical-thinking and problem-solving skills to develop creative solutions for design problems;
- (C) draw a site plan;
- (D) draw a floor plan;
- (E) draw interior and exterior elevations;
- (F) draw a roof plan;
- (G) prepare door and window schedules;
- (H) draw wall sections;
- (I) draw a plot plan; and
- (J) draw an electrical and reflected ceiling plan.

(12) The student designs and prepares a technical drawing. The student is expected to:

- (A) draw individual parts;
- (B) draw the closed assembly drawings per the parts;
- (C) draw and explode the assembly with the parts list.

and

§127.787. Intermediate Computer-Aided Design and Drafting (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Architectural Design I, Introduction to Computer-Aided Design and Drafting, or Engineering Design and Presentation I. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Science (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services, including laboratory and testing services, and research and development services.

(3) In Intermediate Computer-Aided Design and Drafting (CADD), students develop practices and techniques used in

computer-aided drafting, emphasizing the development and use of prototype drawings, construction of pictorial drawings, construction of three-dimensional drawings, interfacing two-dimensional and three-dimensional environments, and extracting data. Basic rendering techniques will also be developed. Emphasis is placed on drawing set-up; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects; adding text and dimensions; using layers and coordinating systems, as well as using input and output devices.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

- (A) describe the roles, responsibilities, and dynamics of a team as applied in appropriate industry fields;
- (B) explain employers' work expectations;
- (C) demonstrate knowledge of the concepts and skills related to health and safety in the workplace as specified by appropriate governmental regulations;
- (D) evaluate and justify decisions based on ethical reasoning;
- (E) evaluate alternative responses to workplace situations based on personal, professional, ethical, and legal responsibilities and employer policies;

(F) identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace;

(G) interpret and explain written organizational policies and procedures; and

(H) demonstrate personal responsibility, ethics, and integrity, including respect for intellectual property, when accessing information and creating design projects.

(2) The student demonstrates an understanding of CADD terminology, tools, and symbols. The student is expected to:

- (A) apply the Cartesian Coordinate Systems to illustrate the application of Z coordinates;
- (B) describe the CADD menu structure;
- (C) differentiate between type-in commands, icons, and pulldown menus;
- (D) manipulate the standard draw commands;
- (E) demonstrate modifying commands;
- (F) explain the various modes of viewing drawings; and
- (G) define and modify dimension styles.

(3) The student produces hand sketches to organize ideas and communicate design ideas. The student is expected to:

- (A) demonstrate the use of graphic descriptions;

(B) develop skill in sketching or mark making to plan, execute, and construct two-dimensional images and three-dimensional models;

(C) demonstrate methods of projection; and

(D) use proper drafting techniques to convert sketches into an electronic drawing using CADD.

(4) The student demonstrates an understanding of commands in a CADD system. The student is expected to:

(A) operate CADD software;

(B) demonstrate draw commands;

(C) modify drawn objects in CADD software;

(D) create two-dimensional and three-dimensional objects;

(E) convert two-dimensional drawings to three-dimensional drawings;

(F) convert three-dimensional drawings to two-dimensional drawings;

(G) prepare text blocks in CADD software;

(H) manipulate an external reference or file;

(I) import files of different formats into CADD;

(J) demonstrate the plot command in print or plot drawings; and

(K) import and export data using attributes.

(5) The student performs computer-aided drafting functions. The student is expected to:

(A) create text styles, text justification, and multi-line text;

(B) create and use multi-leaders;

(C) edit dimensions;

(D) work with dimension styles;

(E) crosshatch objects;

(F) isolate and hide objects;

(G) use selection set methods;

(H) use rectangular, polar, and path arrays;

(I) use rotation reference angles;

(J) use elements of creativity and organizational principles to create visually coherent viewports and layouts;

(K) create and manage layers and properties;

(L) use page setup for plotting;

(M) create, insert, and edit reusable content such as symbols and blocks;

(N) use specific line types using the Standard Alphabet of Lines;

(O) create fills and gradients; and

(P) edit hatch patterns and fills.

(6) The student creates drawings using the CADD software. The student is expected to:

(A) translate hand sketches into CADD software;

(B) create projected mechanical drawings;

(C) create drawings with external references;

(D) complete a three-dimensional parametric model;

(E) organize a complex assembly, including an animated exploded assembly;

(F) compare various methods of drawing solids;

(G) construct a composite drawing using multiple drawings;

(H) justify correct drawing methods;

(I) draw lines, arcs, and circles to represent plans or mechanical assemblies;

(J) create text styles, text justification, and multi-line text;

(K) create and use multi-leaders;

(L) edit dimensions, including dimension styles;

(M) isolate and hide objects;

(N) use selection set methods;

(O) use elements of creativity and organizational principles to create visually coherent viewports and layouts;

(P) create and manage layers;

(Q) use page setup for plotting; and

(R) prepare multi-view drawings, including sectional and auxiliary views.

(7) The student creates electrical drawings. The student is expected to:

(A) prepare schematic drawings;

(B) prepare printed circuit board assembly drawing packages;

(C) prepare connection drawings;

(D) prepare interconnection drawings;

(E) prepare wiring drawings;

(F) prepare cable drawings and/or harness drawings;

(G) prepare component drawings; and

(H) prepare logic diagrams.

(8) The student creates mechanical drawings. The student is expected to:

(A) prepare fastener, cam, gear, spring, and bearing drawings;

(B) prepare detail drawings;

(C) prepare surface developments;

(D) prepare welding drawings;

(E) prepare bearing drawings;

(F) prepare casting drawings;

(G) prepare forging drawings;

(H) prepare tool drawings;

(I) prepare molding diagrams;

(J) prepare stamping drawings;

(K) prepare numerical-control drawings;

(L) modify drawings to include material specifications and parts list; and

(M) identify geometric tolerances and dimensioning of specific machined surfaces.

(9) The student prepares CADD project designs. The student is expected to:

(A) develop a floor plan depicting all elements of the building, including BIM (building information modeling);

(B) render a site plan that depicts all elements of the site;

(C) render exterior and interior elevations;

(D) draw a specified roof type within a plan;

(E) prepare door and window schedules;

(F) draw a wall and building section;

(G) draw an overall site plan;

(H) draw a building plot plan;

(I) review and revise plans throughout the design process to refine and achieve design objective;

(J) demonstrate flexibility and adaptability throughout the design process; and

(K) define a basic project materials list.

§127.788. Fundamentals of Computer Science (One Credit), Adopted 2021.

(a) General requirements. Students shall be awarded one credit for successful completion of this course. This course is recommended for students in Grades 7-12.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) Fundamentals of Computer Science is intended as a first course for those students just beginning the study of computer science. Students will learn about the computing tools that are used every day. Students will foster their creativity and innovation through opportunities to design, implement, and present solutions to real-world problems. Students will collaborate and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students will learn computational thinking, problem-solving, and reasoning skills that are the foundation of computer science. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws, regulations, and best practices and by practicing integrity and respect. Students will gain an understanding of the

principles of computer science through the study of technology operations and concepts.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) Employability. The student identifies various employment opportunities in the computer science field. The student is expected to:

(A) identify job opportunities and accompanying job duties and tasks;

(B) examine the role of certifications, resumes, and portfolios in the computer science profession;

(C) employ effective technical reading and writing skills;

(D) employ effective verbal and non-verbal communication skills;

(E) solve problems and think critically;

(F) demonstrate leadership skills and function effectively as a team member;

(G) demonstrate an understanding of legal and ethical responsibilities in relation to the field of computer science;

(H) demonstrate planning and time-management skills;
and

(I) compare university computer science programs.

(2) Creativity and innovation. The student develops products and generates new knowledge, understanding, and skills. The student is expected to:

(A) investigate and explore various career opportunities within the computer science field and report findings through various media;

(B) create algorithms for the solution of various problems;

(C) discuss methods and create and publish web pages using a web-based language such as HTML, Java Script, or XML; and

(D) use generally accepted design standards for spacing, fonts, and color schemes to create functional user interfaces, including static and interactive screens.

(3) Communication and collaboration. The student communicates and collaborates with peers to contribute to his or her own learning and the learning of others. The student is expected to:

(A) seek and respond to advice or feedback from peers, educators, or professionals when evaluating problem solutions;

(B) debug and solve problems using reference materials and effective strategies; and

(C) publish information in a variety of ways such as print, monitor display, web pages, or video.

(4) Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:

(A) demonstrate the ability to insert external standalone objects such as scripts or widgets into web pages;

(B) demonstrate understanding of binary representation of data in computer systems, perform conversions between decimal and binary number systems, and count in binary number systems;

(C) identify a problem's description, purpose, and goals;

(D) demonstrate coding proficiency in a programming language by developing solutions that create stories, games, and animations;

(E) identify and use the appropriate data type to properly represent the data in a program problem solution;

(F) demonstrate an understanding of and use variables within a programmed story, game, or animation;

(G) demonstrate proficiency in the use of arithmetic operators to create mathematical expressions, including addition, subtraction, multiplication, real division, integer division, and modulus division;

(H) demonstrate an understanding of and use sequence within a programmed story, game, or animation;

(I) demonstrate an understanding of and use conditional statements within a programmed story, game, or animation;

(J) demonstrate an understanding of and use iteration within a programmed story, game, or animation;

(K) use random numbers within a programmed story, game, or animation; and

(L) test program solutions by investigating intended outcomes.

(5) Digital citizenship. The student explores and understands safety, legal, cultural, and societal issues relating to the use of technology and information. The student is expected to:

(A) discuss privacy and copyright laws/issues and model ethical acquisition of digital information by citing sources using established methods;

(B) compare various non-copyright asset sharing options such as open source, freeware, and public domain;

(C) demonstrate proper digital etiquette and knowledge of acceptable use policies when using networks;

(D) discuss the value of strong passwords and virus detection/prevention for privacy and security;

(E) discuss the impact of computing and computing-related advancements on society; and

(F) discuss how electronic media can affect reliability of information.

(6) Technology operations and concepts. The student understands technology concepts, systems, and operations as they apply to computer science. The student is expected to:

(A) demonstrate knowledge of the basic computer components, including a central processing unit (CPU), storage, and input/output devices;

(B) use system tools, including appropriate file management;

(C) demonstrate knowledge of different operating systems;

(D) describe the differences between an application and an operating system; and

(E) use various input, processing, output, and primary/secondary storage devices.

§127.789. Computer Science I (One Credit), Adopted 2021.

(a) General requirements. Students shall be awarded one credit for successful completion of this course. Required corequisite: Algebra I. This course is recommended for students in Grades 8-12.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) Computer Science I will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through computational thinking and data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws, regulations, and best practices and by practicing integrity and respect. Students will gain an understanding of the principles of computer science through the study of technology operations, systems, and concepts.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) Employability. The student identifies various employment opportunities in the computer science field. The student is expected to:

(A) identify job opportunities and accompanying job duties and tasks;

(B) examine the role of certifications, resumes, and portfolios in the computer science profession;

(C) employ effective technical reading and writing skills;

(D) employ effective verbal and non-verbal communication skills;

(E) solve problems and think critically;

(F) demonstrate leadership skills and function effectively as a team member;

(G) demonstrate an understanding of legal and ethical responsibilities in relation to the field of computer science;

(H) demonstrate planning and time-management skills;
and

(I) compare university computer science programs.

(2) Communication and collaboration. The student communicates and collaborates with peers to contribute to his or her own learning and the learning of others. The student is expected to:

(A) participate in learning communities as a learner, initiator, contributor, and teacher/mentor; and

(B) seek and respond to advice from peers, educators, or professionals when evaluating quality and accuracy of the student's product.

(3) Programming style and presentation. The student utilizes proper programming style and develops appropriate visual presentation of data, input, and output. The student is expected to:

(A) create and properly label and display output;

(B) create interactive input interfaces, with relevant user prompts, to acquire data from a user such as console displays or Graphical User Interfaces (GUIs);

(C) write programs with proper programming style to enhance the readability and functionality of a code by using descriptive identifiers, internal comments, white space, spacing, indentation, and a standardized program style;

(D) format data displays using standard formatting styles; and

(E) display simple vector graphics using lines, circles, and rectangles.

(4) Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:

(A) use program design problem-solving strategies to create program solutions;

(B) create a high-level program plan using a visual tool such as a flow chart or graphic organizer;

(C) identify the tasks and subtasks needed to solve a problem;

(D) identify the data types and objects needed to solve a problem;

(E) identify reusable components from existing code;

(F) design a solution to a problem;

(G) code a solution from a program design;

(H) identify error types, including syntax, lexical, run time, and logic;

(I) test program solutions with valid and invalid test data and analyze resulting behavior;

(J) debug and solve problems using error messages, reference materials, language documentation, and effective strategies;

(K) explore common algorithms such as finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;

(L) create program solutions that address basic error handling such as preventing division by zero and type mismatch;

(M) select the most appropriate construct for a defined problem;

(N) create program solutions by using the arithmetic operators to create mathematical expressions, including addition, subtraction, multiplication, real division, integer division, and modulus division;

(O) create program solutions to problems using available mathematics library functions or operators, including absolute value, round, power, square, and square root;

(P) develop program solutions that use assignment;

(Q) develop sequential algorithms to solve non-branching and non-iterative problems;

(R) develop algorithms to decision-making problems using branching control statements;

(S) develop iterative algorithms and code programs to solve practical problems;

(T) demonstrate proficiency in the use of the relational operators;

(U) demonstrate proficiency in the use of the logical operators; and

(V) generate and use random numbers.

(5) Digital citizenship. The student explores and understands safety, legal, cultural, and societal issues relating to the use of technology and information. The student is expected to:

(A) discuss intellectual property, privacy, sharing of information, copyright laws, and software licensing agreements;

(B) model ethical acquisition and use of digital information;

(C) demonstrate proper digital etiquette, responsible use of software, and knowledge of acceptable use policies;

(D) investigate measures, including strong passwords, pass phrases, and other methods of authentication, as well as virus detection/prevention for privacy and security; and

(E) investigate computing and computing-related advancements and the social and ethical ramifications of computer usage.

(6) Technology operations, systems, and concepts. The student understands technology concepts, systems, and operations as they apply to computer science. The student is expected to:

(A) demonstrate knowledge of major hardware components, including primary and secondary memory, a central processing unit (CPU), and peripherals;

(B) differentiate between current programming languages, discuss the general purpose for each language, and demonstrate knowledge of specific programming terminology and concepts and types of software development applications;

(C) differentiate between a high-level compiled language and an interpreted language;

- (D) identify and use concepts of object-oriented design;
- (E) differentiate between local and global scope access variable declarations;
- (F) encapsulate data and associated subroutines into an abstract data type;
- (G) create subroutines that do not return values with and without the use of arguments and parameters;
- (H) create subroutines that return typed values with and without the use of arguments and parameters;
- (I) create calls to processes passing arguments that match parameters by number, type, and position;
- (J) compare data elements using logical and relational operators;
- (K) identify and convert binary representation of numeric and nonnumeric data in computer systems using American Standard Code for Information Interchange (ASCII) or Unicode;
- (L) identify finite limits of numeric data such as integer wrap around and floating point precision;
- (M) perform numerical conversions between the decimal and binary number systems and count in the binary number system;
- (N) choose, identify, and use the appropriate data types for integer, real, and Boolean data when writing program solutions;
- (O) analyze the concept of a variable, including primitives and objects;
- (P) represent and manipulate text data, including concatenation and other string functions;
- (Q) identify and use the structured data type of one-dimensional arrays to traverse, search, and modify data;
- (R) choose, identify, and use the appropriate data type or structure to properly represent the data in a program problem solution; and
- (S) compare strongly typed and un-typed programming languages.

§127.790. Computer Science II (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Algebra I and Computer Science I or AP Computer Science Principles. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) Computer Science II will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course.

Through computational thinking and data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will gain an understanding of computer science through the study of technology operations, systems, and concepts.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) Employability. The student identifies various employment opportunities in the computer science field. The student is expected to:

(A) identify job opportunities and accompanying job duties and tasks;

(B) examine the role of certifications, resumes, and portfolios in the computer science profession;

(C) employ effective technical reading and writing skills;

(D) employ effective verbal and non-verbal communication skills;

(E) solve problems and think critically;

(F) demonstrate leadership skills and function effectively as a team member;

(G) identify legal and ethical responsibilities in relation to the field of computer science;

(H) demonstrate planning and time-management skills;

(I) compare university computer science programs.

(2) Creativity and innovation. The student develops products and generates new understandings by extending existing knowledge. The student is expected to:

(A) use program design problem-solving strategies to create program solutions;

(B) read, analyze, and modify programs and their accompanying documentation such as an application programming interface (API), internal code comments, external documentation, or readme files;

(C) follow a systematic problem-solving process of identifying the purpose and goals, the data types and objects needed, and the subtasks to be performed;

(D) compare design methodologies and implementation techniques such as top-down, bottom-up, and black box;

(E) trace a program, including inheritance and black box programming;

(F) choose, identify, and use the appropriate abstract data type, advanced data structure, and supporting algorithms to properly represent the data in a program problem solution; and

(G) use object-oriented programming development methodology, data abstraction, encapsulation with information hiding, inheritance, and procedural abstraction in program development and testing.

(3) Communication and collaboration. The student communicates and collaborates with peers to contribute to his or her own learning and the learning of others. The student is expected to:

(A) use the principles of software development to work in software design teams;

(B) break a problem statement into specific solution requirements;

(C) create a program development plan;

(D) code part of a solution from a program development plan while a partner codes the remaining part;

(E) collaborate with a team to test a solution, including boundary and standard cases; and

(F) develop presentations to report the solution findings.

(4) Data literacy and management. The student locates, analyzes, processes, and organizes data. The student is expected to:

(A) utilize programming file structure and file access for required resources;

(B) acquire and process information from text files, including files of known and unknown sizes;

(C) manipulate data using string processing;

(D) manipulate data values by casting between data types;

(E) use the structured data type of one-dimensional arrays to traverse, search, modify, insert, and delete data;

(F) identify and use the structured data type of two-dimensional arrays to traverse, search, modify, insert, and delete data;

(G) identify and use a list object data structure to traverse, search, insert, and delete data; and

(H) differentiate between categories of programming languages, including machine, assembly, high-level compiled, high-level interpreted, and scripted.

(5) Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:

(A) develop sequential algorithms using branching control statements, including nested structures, to create solutions to decision-making problems;

(B) develop choice algorithms using selection control statements based on ordinal values;

(C) demonstrate proficiency in the use of short-circuit evaluation;

(D) demonstrate proficiency in the use of Boolean algebra, including De Morgan's Law;

(E) develop iterative algorithms using nested loops;

(F) identify, trace, and appropriately use recursion in programming solutions, including algebraic computations;

(G) trace, construct, evaluate, and compare search algorithms, including linear searching and binary searching;

(H) identify, describe, trace, evaluate, and compare standard sorting algorithms, including selection sort, bubble sort, insertion sort, and merge sort;

(I) measure time/space efficiency of various sorting algorithms, including analyzing algorithms using "big-O" notation for best, average, and worst-case data patterns;

(J) develop algorithms to solve various problems such as factoring, summing a series, finding the roots of a quadratic equation, and generating Fibonacci numbers;

(K) test program solutions by investigating boundary conditions; testing classes, methods, and libraries in isolation; and performing stepwise refinement;

(L) identify and debug compile, syntax, runtime, and logic errors;

(M) compare algorithm efficiency of linear, quadratic, and recursive strategies by using informal runtime comparisons, exact calculation of statement execution counts, and theoretical efficiency values using "big-O" notation, including worst-case, best-case, and average-case time/space analysis of search and sort algorithms;

(N) demonstrate the ability to count, convert, and perform mathematical operations in the decimal, binary, octal, and hexadecimal number systems;

(O) demonstrate knowledge of the maximum integer boundary, minimum integer boundary, imprecision of real number representations, and round-off errors;

(P) create program solutions to problems using a mathematics library;

(Q) use random number generator algorithms to create simulations;

(R) use composition and inheritance relationships to identify and create class definitions and relationships;

(S) explain and use object relationships between defined classes, abstract classes, and interfaces;

(T) create object-oriented class definitions and declarations using variables, constants, methods, parameters, and interface implementations;

(U) create adaptive behaviors using polymorphism;

(V) use reference variables for object and string data types;

(W) use value and reference parameters appropriately in method definitions and method calls;

(X) implement access scope modifiers;

(Y) use object comparison for content quality;

(Z) duplicate objects using the appropriate deep or shallow copy;

(AA) apply functional decomposition to a program solution;

(BB) create objects from class definitions through instantiation; and

(CC) examine and mutate the properties of an object using accessors and modifiers.

§127.791. Computer Science III (One Credit), Adopted 2021.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Computer Science II, Advanced Placement (AP) Computer Science A, or International Baccalaureate (IB) Computer Science. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.

(2) The Science, Technology, Engineering, and Mathematics (STEM) Career Cluster focuses on planning, managing, and providing scientific research and professional and technical services such as laboratory and testing services and research and development services.

(3) Computer Science III will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through computational thinking and data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will gain an understanding of advanced computer science data structures through the study of technology operations, systems, and concepts.

(4) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(5) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(c) Knowledge and skills.

(1) Employability. The student identifies various employment opportunities in the computer science field. The student is expected to:

(A) identify job opportunities and accompanying job duties and tasks;

(B) examine the role of certifications, resumes, and portfolios in the computer science profession;

(C) employ effective technical reading and writing skills;

(D) employ effective verbal and non-verbal communication skills;

(E) solve problems and think critically;

(F) demonstrate leadership skills and function effectively as a team member;

(G) demonstrate an understanding of legal and ethical responsibilities in relation to the field of computer science;

(H) demonstrate planning and time-management skills; and

(I) compare university computer science programs.

(2) Creativity and innovation. The student develops products and generates new understandings by extending existing knowledge. The student is expected to:

(A) apply object-oriented programming, including data abstraction, encapsulation, inheritance, and polymorphism, to manage complexity;

(B) design and implement a class hierarchy;

(C) read and write class specifications using visual organizers, including Unified Modeling Language;

(D) identify, describe, evaluate, compare, and implement standard sorting algorithms that perform sorting operations on data structures, including quick sort and heap sort; and

(E) identify and use the appropriate abstract data type, advanced data structure, and supporting algorithms to properly represent the data in a program problem solution.

(3) Communication and collaboration. The student communicates and collaborates with peers to contribute to his or her own learning and the learning of others. The student is expected to:

(A) use networked tools for file management and collaboration; and

(B) work in software design teams.

(4) Data literacy and management. The student locates, analyzes, processes, and organizes data. The student is expected to:

(A) identify and use two-dimensional ragged arrays to traverse, search, modify, insert, and delete data;

(B) describe and demonstrate proper linked list management, including maintaining the head and safe addition and deletion of linked objects;

(C) create or trace program solutions using a linked-list data structure, including unordered single, ordered single, double, and circular linked;

(D) describe composite data structures, including a linked list of linked lists;

(E) create or trace program solutions using stacks, queues, trees, heaps, priority queues, graph theory, and enumerated data types;

(F) create or trace program solutions using sets, including hash and tree-based data structures;

(G) create or trace program solutions using map style data structures; and

(H) write and modify text file data.

(5) Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:

(A) evaluate expressions using bitwise operators;

(B) evaluate expressions using the ternary operator;

(C) identify, trace, and appropriately use recursion in programming solutions, including processing binary trees;

(D) create or trace program solutions using hashing;

(E) explore common algorithms such as matrix addition and multiplication, fractals, Towers of Hanoi, and magic square; and

(F) create program solutions that exhibit robust behavior by recognizing and avoiding runtime errors and handling anticipated errors.

(6) Testing and documentation. The student demonstrates appropriate documentation and testing practices. The student is expected to:

(A) use appropriate formatting and write documentation to support code maintenance, including pre- and post-condition statements;

(B) write program assumptions in the form of assertions;

(C) write a Boolean expression to test a program assertion; and

(D) construct assertions to make explicit program invariants.

(7) Practical application of technology. The student utilizes technology concepts, systems, and operations as they apply to computer science. The student is expected to:

(A) analyze and create computer program workflow charts and basic system diagrams, documenting system functions, features, and operations;

(B) gather requirements, design, and implement a process by which programs can interact with each other such as using interfaces;

(C) create simple programs using a low-level language such as assembly;

(D) create discovery programs in a high-level language;

(E) create scripts for an operating system;

(F) explore industry best practices for secure programming; and

(G) explore emerging industry or technology trends.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103817

Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 475-1497



TITLE 25. HEALTH SERVICES

PART 1. DEPARTMENT OF STATE HEALTH SERVICES

CHAPTER 117. END STAGE RENAL DISEASE FACILITIES

SUBCHAPTER D. MINIMUM STANDARDS FOR PATIENT CARE AND TREATMENT

25 TAC §117.49

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes new §117.49, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed new §117.49 adds language prohibiting an end stage renal disease facility (ESRD) from discriminating against an organ transplant recipient based on the patient's disability and requiring an ESRD to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will create a new rule;
- (6) the proposed rule will not expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed ESRDs to comply with the provisions of H.B. 119. ESRDs may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff

on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 785 licensed ESRDs in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed new rule may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The new rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies; Texas Health and Safety Code §251.003, which authorizes the Executive Commissioner of HHSC to adopt rules governing ESRD facilities; and Texas Health and Safety Code §251.014, which

requires these rules to include minimum standards to protect the health and safety of a patient of an ESRD facility.

The new rule implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§117.49. Miscellaneous Policies and Protocols.

A licensed end stage renal disease facility shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103795

Karen Ray

Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 133. HOSPITAL LICENSING SUBCHAPTER C. OPERATIONAL REQUIREMENTS

25 TAC §133.45

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes amendments to §133.45, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 3721, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules requiring abortion facilities and hospitals to comply with the human trafficking signage requirements required by Texas Health and Safety Code §245.025.

The proposal is also necessary to comply with H.B. 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed amendment to §133.45 adds language requiring hospitals to comply with Texas Health and Safety Code, Chapter 245.025, Human Trafficking Signs Required. This change is consistent with H.B. 3721's provision requiring HHSC to adopt rules necessary to implement that bill.

The proposed amendment to §133.45 also adds language prohibiting a hospital from discriminating against an organ transplant recipient based on the patient's disability and requiring a hospital to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to pro-

hibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will not create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rules; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses or micro-businesses, or rural communities.

The proposed amendment requires licensed hospitals to comply with the provisions of H.B. 3721 and may cause hospital districts, including municipally-owned and county-owned hospitals, to incur costs to update human trafficking signage to include contact information for reporting suspicious activity to the Department of Public Safety. Local governments that own any of these facilities would likely incur costs to design, print, and post updated signage. HHSC lacks data to estimate the costs each entity would incur for this purpose.

The proposed amendment requires licensed hospitals to comply with the provisions of H.B. 119. Hospitals may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rules.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 3721 and H.B. 119. However, there are a total of 641 licensed hospitals in Texas, including two hospitals owned by rural communities.

LOCAL EMPLOYMENT IMPACT

The proposed rules will affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 3721 because the bill requires hospitals and abortion facilities to update required human trafficking signage to include the contact information for reporting suspicious activity to DPS, which will likely enhance the health and safety of vulnerable Texans across the state. The public will also benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed amended rule may incur economic costs because the proposed amendment implementing H.B. 119's provisions may require health care facilities to update current policies and procedures and train staff on those changes, and the proposed amendment implementing H.B. 3721's provisions requires hospitals to update human trafficking signage.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The amended rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §241.026, which authorizes the Executive Commissioner of HHSC to adopt rules governing development, establishment, and enforcement standards for the construction, maintenance, and operation of licensed hospitals.

The amended rule implements Texas Health and Safety Code §241.011, Human Trafficking Signs Required, and Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§133.45. *Miscellaneous Policies and Protocols.*

(a) Determination of death and autopsy reports. The hospital shall adopt, implement, and enforce protocols to be used in determining death and for filing autopsy reports which comply with Health and Safety Code (HSC), Title 8, Subtitle A, Chapter 671 (Determination of Death and Autopsy Reports).

(b) Organ and tissue donors. The hospital shall adopt, implement, and enforce a written protocol to identify potential organ and tissue donors which is in compliance with the Texas Anatomical Gift Act, HSC, Chapter 692. The hospital shall make its protocol available to the public during the hospital's normal business hours.

(1) The hospital's protocol shall include all requirements in HSC, Chapter 692, §692.013 (Hospital Protocol).

(2) A hospital which performs organ transplants shall be a member of the Organ Procurement and Transplantation Network in accordance with 42 United States Code, §274 (Organ Procurement and Transplantation Network).

(c) Discrimination prohibited. A licensed hospital shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

(d) [(e)] All-hazard disaster preparedness.

(1) Definitions.

(A) Adult intensive care unit (ICU)--Can support critically ill/injured patients, including ventilator support.

(B) Burn or burn ICU--Either approved by the American Burn Association or self-designated. (These beds should not be included in other ICU bed counts.)

(C) Medical/surgical--Also thought of as "ward" beds.

(D) Negative pressure/isolation--Beds provided with negative airflow, providing respiratory isolation. Note: This value may represent available beds included in the counts of other types.

(E) Operating rooms--An operating room that is equipped and staffed and could be made available for patient care in a short period.

(F) Pediatric ICU--The same as adult ICU, but for patients 17 years and younger.

(G) Pediatrics--Ward medical/surgical beds for patients 17 years and younger.

(H) Physically available beds--Beds that are licensed, physically set up, and available for use. These are beds regularly maintained in the hospital for the use of patients, which furnish accommodations with supporting services (such as food, laundry, and housekeeping). These beds may or may not be staffed but are physically available.

(I) Psychiatric--Ward beds on a closed/locked psychiatric unit or ward beds where a patient will be attended by a sitter.

(J) Staffed beds--Beds that are licensed and physically available for which staff members are available to attend to the patient who occupies the bed. Staffed beds include those that are occupied and those that are vacant.

(K) Vacant/available beds--Beds that are vacant and to which patients can be transported immediately. These must include supporting space, equipment, medical material, ancillary and support services, and staff to operate under normal circumstances. These beds are licensed, physically available, and have staff on hand to attend to the patient who occupies the bed.

(2) A hospital shall adopt, implement, and enforce a written plan for all-hazard, natural or man-made, disaster preparedness for effective preparedness, mitigation, response, and recovery from disasters.

(3) The plan, which may be subject to review and approval by the department, shall be sent to the local disaster management authority.

(4) The plan shall:

(A) be developed through a joint effort of the hospital governing body, administration, medical staff, hospital personnel and emergency medical services partners;

(B) include the applicable information contained in the National Fire Protection Association 99, Standard for Health Care Facilities, 2002 edition, Chapter 12 (Health Care Emergency Management), published by the National Fire Protection Association (NFPA), and the State of Texas Emergency Management Plan. Information regarding the State of Texas Emergency Management Plan is available from the city or county emergency management coordinator. The NFPA document referenced in this section may be obtained by writing or calling the NFPA at the following address and telephone number: 1 Batterymarch Park, Post Office Box 9101, Quincy, Massachusetts 02269-9101, (800) 344-3555;

(C) contain the names and contact numbers of city and county emergency management officers and the hospital water supplier;

(D) be exercised at least annually and in conjunction with state and local exercises. Hospitals participating in an exercise or responding to a real-life event shall develop an after-action report (AAR) within 60 days. AARs shall be retained for at least three years and be available for review by the local emergency management authority and the department;

(E) include the methodology for notifying the hospital personnel and the local disaster management authority of an event that will significantly impact hospital operations;

(F) include evidence that the hospital has communicated prospectively with the local utility and phone companies regarding the need for the hospital to be given priority for the restoration of utility and phone services and a process for testing internal and external communications systems regularly;

(G) include the use of a department approved process to update bed availability, as follows:

(i) as requested by the department during a public health emergency or state declared disaster; and

(ii) for the physically available beds and staffed beds that are vacant/available beds for the following bed types:

(I) adult ICU;

(II) burn or burn ICU;

(III) medical/surgical;

(IV) negative pressure/isolation;

(V) operating rooms;

(VI) pediatric ICU;

(VII) pediatrics; and

(VIII) psychiatric;

(iii) emergency department divert status;

(iv) for decontamination facility available; and

(v) for ventilators available;

(H) include at a minimum:

(i) a component for the reception, treatment, and disposition of casualties that can be used in the event that a disaster situation requires the hospital to accept multiple patients. This component shall include at a minimum:

(I) process, developed in conjunction with appropriate agencies, to allow essential healthcare workers and personnel to safely access their delivery care sites;

(II) procedures for the appropriate provision of personal protection equipment for and appropriate immunization of staff, volunteers, and staff families; and

(III) plan to provide food and shelter for staff and volunteers as needed throughout the duration of response;

(ii) an evacuation component that can be engaged in any emergency situation necessitating either a full or partial evacuation of the hospital. The evacuation component shall address at a minimum:

(I) activation, including who makes the decision to activate and how it is activated;

(II) when within control of the hospital, patient evacuation destination, including protocol to ensure that the patient destination is compatible to patient acuity and health care needs, plan for the order of removal of patients and planned route of movement, train and drill staff on the traffic flow and the movement of patients to a staging area, and room evacuation protocol;

(III) family/responsible party notification, including the procedure to notify patient emergency contacts of an evacuation and the patient's destination; and

(IV) transport of records and supplies, including the protocol for the transfer of patient specific medications and records to the receiving facility. These records shall include at a minimum: the patient's most recent physician's assessment, order sheet, medication administration record (MAR), and patient history with physical documentation. A weather-proof patient identification wrist band (or equivalent identification) must be intact on all patients.

(c) [(d)] Voluntary paternity establishment services. A hospital that handles the birth of newborns must provide voluntary paternity establishment services in accordance with:

(1) the HSC, §192.012, Record of Acknowledgment of Paternity; and

(2) the rules of the Office of the Attorney General found at 1 TAC Chapter 55, Subchapter J (relating to Voluntary Paternity Acknowledgment Process).

(f) [(e)] Harassment and abuse. A hospital shall adopt, implement and enforce a written policy for identifying and addressing instances of alleged verbal or physical abuse or harassment of hospital employees or contracted personnel by other hospital employees or contracted personnel or by a health care provider who has clinical privileges at the hospital.

(g) [(f)] Information for parents of newborn children. A hospital that provides prenatal care to a pregnant woman during gestation or at delivery of an infant, shall adopt, implement and enforce written policies to ensure compliance with HSC, Chapter 161, Subchapter T, §161.501 (relating to Parenting and Postpartum Counseling Information).

(1) The policy shall require that the woman and the father of the infant, if possible, or another adult caregiver for the infant, be provided with a resource pamphlet which includes:

(A) information on professional organizations providing counseling and assistance relating to postpartum depression and other emotional trauma associated with pregnancy and parenting;

(B) information regarding the prevention of shaken baby syndrome, as specified under HSC, §167.501(a)(1)(B)(i) - (iv);

(C) a list of diseases for which a child is required by state law to be immunized and the appropriate schedule for the administration of those immunizations; and

(D) the appropriate schedule for follow-up procedure for newborn screening.

(2) The policy shall include a requirement that it be documented in the woman's record that the information was provided, and that the documentation be maintained for at least five years.

(h) [(g)] Abortion. A hospital that performs abortions shall adopt, implement and enforce policies to:

(1) ensure compliance with HSC, Chapter 171;

(2) ensure compliance with Occupations Code, §164.052(a)(19) (relating to Parental Consent for Abortion).

(i) [(h)] Influenza and pneumococcal vaccine for elderly persons. The hospital shall adopt, implement and enforce a policy for providing influenza and pneumococcal vaccines for elderly persons. The policy shall:

(1) establish that an elderly person, defined as 65 years of age or older, who is admitted to the hospital for a period of 24 hours or more, is informed of the availability of the influenza and pneumococcal vaccines, and, if they request the vaccine, is assessed to determine if receipt of the vaccine is in their best interest. If determined appropriate by the physician or other qualified medical personnel, the elderly person shall receive the vaccines prior to discharge from the hospital;

(2) include provisions that the influenza vaccine shall be made available in October and November, and if available, December, and pneumococcal vaccine shall be made available throughout the year;

(3) require that the person administering the vaccine ask the elderly patient if they are currently vaccinated against influenza or pneumococcal disease, assess potential contraindications, and then, if appropriate, administer the vaccine under approved hospital protocols; and

(4) address required documentation of the vaccination in the patient medical record.

(5) The department may waive requirements related to the administration of the vaccines based on established shortages of the vaccines.

(j) Human Trafficking Signage Required. A licensed hospital shall comply with human trafficking signage requirements in accordance with Texas Health and Safety Code §241.011 (relating to Human Trafficking Signs Required).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103796

Karen Ray

Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 135. AMBULATORY SURGICAL CENTERS

SUBCHAPTER A. OPERATING REQUIREMENTS FOR AMBULATORY SURGICAL CENTERS

25 TAC §135.30

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes new §135.30, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed new §135.30 adds language prohibiting an ambulatory surgical center (ASC) from discriminating against an organ transplant recipient based on the patient's disability and requiring an ASC to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

(1) the proposed rule will not create or eliminate a government program;

(2) implementation of the proposed rule will not affect the number of HHSC employee positions;

(3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;

(4) the proposed rule will not affect fees paid to HHSC;

(5) the proposed rule will create a new rule;

(6) the proposed rule will not expand existing rule;

(7) the proposed rule will not change the number of individuals subject to the rule; and

(8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be no adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed ASCs to comply with the provisions of H.B. 119. ASCs may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 560 licensed ASCs in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed new rule may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The new rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §243.009, which requires HHSC to adopt rules for licensing of ASCs, and Texas Health and Safety Code §243.010, which requires those rules to include minimum standards applicable to ASCs.

The new rule implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§135.30. Miscellaneous Policies and Protocols.

A licensed ambulatory surgical center shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103797

Karen Ray
Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 137. BIRTHING CENTERS SUBCHAPTER D. OPERATIONAL AND CLINICAL STANDARDS FOR THE PROVISION AND COORDINATION OF TREATMENT AND SERVICES

25 TAC §137.55

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes an amendment to 25 TAC §137.55, concerning Other State and Federal Compliance Requirements.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC

to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed amendment to §137.55 adds language prohibiting a birthing center from discriminating against an organ transplant recipient based on the patient's disability and requiring a birthing center to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will not create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be no adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed amendment requires licensed Birthing Centers to comply with the provisions of H.B. 119. Birthing Centers may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 93 licensed birthing centers in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rule.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed amendment may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The amendment is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, Texas Health and Safety Code §244.009, which requires HHSC to adopt rules for licensing of birthing centers, and Texas Health and Safety Code §244.010, which requires those rules to include minimum standards applicable to birthing centers.

The amendment implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§137.55. *Other State and Federal Compliance Requirements.*

(a) A center utilizing the services of a licensed midwife shall ensure that all licensed midwives utilized do not violate the Texas Midwifery Act, Texas Occupations Code, Chapter 203, concerning prohib-

ited acts and criminal penalties, while functioning in his or her capacity at or for the center.

(b) A center shall ensure that its licensed midwives comply with Title 22 Texas Administrative Code, Chapter 831 (relating to Midwifery), while functioning in his or her capacity at or for the center.

(c) A center that provides laboratory services shall meet the Clinical Laboratory Improvement Amendments of 1988 (CLIA 88), 42 Code of Federal Regulations, §§493.1 - 493.1780 (CLIA 1988). CLIA 1988 applies to all centers with laboratories that examine human specimens for the diagnosis, prevention, or treatment of any disease or impairment of, or the assessment of the health of, human beings. If a center accepts laboratory test results from another state or foreign country, such as Mexico, the laboratory documents must be reviewed and approved by a licensed health professional within his or her scope of practice.

(d) A center utilizing the services of a registered nurse(s) shall ensure that its registered nurse(s) comply with the Nursing Practice Act, Texas Occupations Code, Chapters 301, 303, and 304, while functioning in his or her capacity at or for the center.

(e) A center utilizing the services of a licensed vocational nurse(s) shall ensure that its licensed vocational nurse(s) comply with Texas Occupations Code, Chapters 301, 303, and 304, while functioning in his or her capacity at or for the center.

(f) A center utilizing the services of a physician(s) shall ensure that its physician(s) comply with the Medical Practice Act, Texas Occupations Code, Chapters 151 - 165, while functioning in his or her capacity at or for the center.

(g) A center utilizing the services of a physician assistant(s) shall ensure that its physician assistant(s) comply with the Physician Assistant Licensing Act, Texas Occupations Code, Chapter 204, while functioning in his or her capacity at or for the center.

(h) A center that provides pharmacy services shall obtain a license as a pharmacy if required by the Texas Pharmacy Act, Texas Occupations Code, Chapters 551 - 569.

(i) A center shall not use adulterated or misbranded drugs or devices in violation of the Health and Safety Code, §431.021. Adulterated drugs and devices are described in Health and Safety Code, §431.111. Misbranded drugs or devices are described in Health and Safety Code, §431.112.

(j) A center shall not commit a false, misleading, or deceptive act or practice as that term is defined in the Deceptive Trade Practices-Consumer Protection Act, Business and Commerce Code, §17.46.

(k) A birthing center must provide voluntary paternity establishment services in accordance with:

(1) the Health and Safety Code, §192.012, Record of Acknowledgment of Paternity; and

(2) the rules of the Office of the Attorney General found at 1 Texas Administrative Code, Chapter 55, Subchapter J (relating to Voluntary Paternity Acknowledgment Process).

(l) A birthing center shall comply with Health and Safety Code, Chapter 47, relating to Hearing Loss in Newborns.

(m) A center shall ensure that its birth attendants comply with Health and Safety Code, §81.090 (relating to Serologic Testing During pregnancy). The center shall ensure that the results of any HIV test are kept confidential pursuant to the Health and Safety Code, §81.103.

(n) A center shall ensure that its birth attendants comply with the Health and Safety Code, §81.091, (relating to Ophthalmia Neonatorum Prevention; Criminal Penalty).

(o) A center shall ensure that its birth attendants cause the newborn screening tests to be performed as required by:

(1) the Health and Safety Code, §33.011 (relating to Test Requirement); and

(2) Texas Occupations Code, §203.354 (relating to Newborn Screening).

(p) A licensed birthing center shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Karen Ray

Chief Counsel

Department of State Health Services

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For further information, please call: (512) 834-4591



CHAPTER 139. ABORTION FACILITY REPORTING AND LICENSING

SUBCHAPTER D. MINIMUM STANDARDS FOR LICENSED ABORTION FACILITIES

25 TAC §139.60

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes amendments to §139.60, concerning Other State and Federal Compliance Requirements.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 3721, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules requiring abortion facilities and hospitals to comply with the human trafficking signage requirements required by Texas Health and Safety Code §245.025.

The proposal is necessary to comply with H.B. 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed amendment to §139.60 adds language requiring an abortion facility to comply with Texas Health and Safety Code, Chapter 245.025, Human Trafficking Signs Required. This change is consistent with H.B. 3721's provision requiring HHSC to adopt rules necessary to implement that bill.

The proposed amendment to §139.60 adds language prohibiting an abortion facility from discriminating against an organ transplant recipient based on the patient's disability and requiring an abortion facility to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rules will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rules as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will not create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rules; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses or micro-businesses, or rural communities.

The proposed amendment requires licensed abortion facilities to comply with the provisions of H.B. 3721 and may cause abortion facilities to incur costs to update human trafficking signage to include contact information for reporting suspicious activity to the Department of Public Safety, which could cause an adverse economic effect on small businesses, micro-businesses, and/or rural communities.

The proposed amendment requires licensed abortion facilities to comply with the provisions of H.B. 119. Abortion facilities may need to update anti-discrimination organ donation policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rules.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 3721 and H.B. 119. However, there are a total of 17 licensed abortion facilities in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rules will affect local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to these rules because the rules are necessary to protect the health, safety, and welfare of the residents of Texas and imposes a cost on regulated persons.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 3721 because the bill requires hospitals and abortion facilities to update required human trafficking signage to include the contact information for reporting suspicious activity to DPS, which will likely enhance the health and safety of vulnerable Texans across the state. The public will also benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed amended rule may incur economic costs because the proposed amendment implementing H.B. 119's provisions may require health care facilities to update current policies and procedures and train staff on those changes, and the proposed amendment implementing H.B. 3721's provisions requires abortion facilities to update human trafficking signage.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The amendment is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §245.009, which requires HHSC to adopt rules for licensing of abortion facilities, and Texas Health and Safety Code §245.010, which requires those rules to include minimum standards to protect the health and safety of a

patient of an abortion facility and comply with Texas Health and Safety Code Chapter 171.

The amendment implements Texas Health and Safety Code §245.025, Human Trafficking Signs Required, and Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§139.60. Other State and Federal Compliance Requirements.

(a) A licensed abortion facility shall be in compliance with all state and federal laws pertaining to handling of drugs.

(b) A licensed abortion facility that provides laboratory services shall meet the Clinical Laboratory Improvement Amendments of 1988, 42 United States Code, §263a, Certification of Laboratories (CLIA 1988). CLIA 1988 applies to all facilities with laboratories that examine human specimens for the diagnosis, prevention, or treatment of any disease or impairment of, or the assessment of the health of, human beings.

(c) A licensed abortion facility shall ensure that its physicians comply with the Medical Practice Act, Occupations Code, Chapters 151 - 160 and 162 - 165, while functioning in his or her capacity at or for the facility.

(d) A licensed abortion facility utilizing the services of a physician assistant(s) shall ensure that its physician assistants comply with the Physician Assistant Licensing Act, Occupations Code, Chapter 204, while functioning in his or her capacity at or for the facility.

(e) A licensed abortion facility utilizing the services of a registered nurse shall ensure that its registered nurses comply with the Nursing Practice Act, Occupations Code, Chapters 301 and 304, while functioning in his or her capacity at or for the facility.

(f) A licensed abortion facility utilizing the services of a licensed vocational nurse(s) shall ensure that its vocational nurse(s) comply with the Nursing Practice Act, Occupations Code, Chapters 301 and 304, while functioning in his or her capacity at or for the facility.

(g) A licensed abortion facility that provides pharmacy services shall obtain a license as a pharmacy if required by the Texas Pharmacy Act, Occupations Code, Chapters 551 - 569.

(h) A licensed abortion facility shall comply with the following federal Occupational Safety and Health Administration requirements:

(1) 29 Code of Federal Regulations, Subpart E, §1910.38, concerning emergency action plan and §1910.39, concerning fire prevention plans;

(2) 29 Code of Federal Regulations, Subpart I, §1910.132, concerning general requirements for personal protective equipment;

(3) 29 Code of Federal Regulations, Subpart I, §1910.133, concerning eye and face protection;

(4) 29 Code of Federal Regulations, Subpart I, §1910.138, concerning hand protection;

(5) 29 Code of Federal Regulations, Subpart K, §1910.151, concerning medical services and first aid;

(6) 29 Code of Federal Regulations, Subpart L, §1910.157, concerning portable fire extinguishers;

(7) 29 Code of Federal Regulations, Subpart Z, §1910.1030, concerning bloodborne pathogens; and

(8) 29 Code of Federal Regulations, Subpart Z, §1910.1200, Appendices A - E, concerning hazard communication (hazardous use of chemicals).

(i) A licensed abortion facility shall not use adulterated or misbranded drugs or devices in violation of the Health and Safety Code, §431.021. Adulterated drugs and devices are described in Health and Safety Code, §431.111. Misbranded drugs or devices are described in Health and Safety Code, §431.112.

(j) A licensed abortion facility shall not commit a false, misleading, or deceptive act or practice as that term is defined in the Deceptive Trade Practices-Consumer Protection Act, Business and Commerce Code, §17.46.

(k) A licensed abortion facility shall comply with the requirements of the Family Code, §33.002, relating to a Consent Form.

(l) A licensed abortion facility shall comply with the requirements of Health and Safety Code, Chapter 171, the Woman's Right to Know Act.

(m) A licensed abortion facility shall comply with the requirements of Occupations Code, Chapter 102, Solicitation of Patients.

(n) Balance Billing.

(1) A licensed abortion facility may not violate a law that prohibits the licensed abortion facility from billing a patient who is an insured, participant, or enrollee in a managed care plan an amount greater than an applicable copayment, coinsurance, and deductible under the insured's, participant's, or enrollee's managed care plan or that imposes a requirement related to that prohibition.

(2) A licensed abortion facility shall comply with Senate Bill 1264, 86th Legislature, Regular Session, 2019, and with related Texas Department of Insurance rules at 28 TAC Chapter 21, Subchapter OO, §§21.4901 - 21.4904 (relating to Disclosures by Out-of-Network Providers) to the extent this subchapter applies to the licensed abortion facility.

(o) A licensed abortion facility shall comply with human trafficking signage requirements in accordance with Texas Health and Safety Code §245.025 (relating to Human Trafficking Signs Required).

(p) A licensed abortion facility shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Karen Ray

Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 140. HEALTH PROFESSIONS

REGULATION

SUBCHAPTER I. LICENSED CHEMICAL

DEPENDENCY COUNSELORS

25 TAC §140.435

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes new §140.435, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed new §140.435 adds language prohibiting a licensed chemical dependency counselor (LCDC), including a counselor intern (CI), from discriminating against an organ transplant recipient based on the patient's disability and requiring an LCDC to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will create a new rule;
- (6) the proposed rule will not expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed LCDCs to comply with the provisions of H.B. 119. LCDCs may need to update anti-discrimination policies to comply with H.B. 119's provisions, which could cause LCDCs to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small business and micro business affected by H.B. 119. However, there are a total of 6,241 LCDCs and 4,156 CIs in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed new rule may require LCDCs to update current policies and procedures.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The new rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Occupations Code §504.051, which authorizes the Executive Commissioner to adopt rules as necessary to establish standards of conduct and ethics for LCDCs.

The new rule implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§140.435. Miscellaneous Policies and Protocols.

A licensed chemical dependency counselor shall not discriminate based on a client's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Karen Ray

Chief Counsel

Department of State Health Services

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For further information, please call: (512) 834-4591



CHAPTER 229. FOOD AND DRUG SUBCHAPTER J. MINIMUM STANDARDS FOR NARCOTIC TREATMENT PROGRAMS

25 TAC §229.144

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes an amendment to §229.144, concerning State and Federal Statutes and Regulations.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with H.B. 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed amendment to §229.144 adds language prohibiting a narcotic treatment program (NTP) from discriminating against an organ transplant recipient based on the patient's disability and requiring an NTP to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will not create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed amendment requires NTP permit holders to comply with the provisions of H.B. 119. NTPs may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 100 NTP permit holders in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rule.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed amendment may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The amendment is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §466.004, which authorizes HHSC to adopt rules for the issuance of permits to operate NTPs, including rules for applications, criteria for issuance of permits, and criteria for the suspension and revocation of permits.

The amendment implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§229.144. *State and Federal Statutes and Regulations.*

(a) A permit holder shall assure that the narcotic treatment program (NTP) is in compliance with all State of Texas laws and rules regulating chemical dependency treatment facilities including, but not limited to, the following laws: Health and Safety Code, Chapters 464 and 466; the Medical Practice Act, Occupations Code, Chapters 151-160, and 162-165; the Nurse Practice Act, Occupations Code, Chapter 301; the Texas Pharmacy Act, Occupations Code, Chapters 551-566; and the Licensed Professional Counselor Act, Occupations Code, Chapter 503.

(b) The permit holder shall assure the NTP is in compliance with Title 42, Code of Federal Regulations, Part 8, titled, "Opioid Drugs in Maintenance and Detoxification Treatment of Opiate Addiction." To the extent that the Code of Federal Regulation conflicts with these sections, these sections shall prevail.

(c) Balance Billing.

(1) An NTP may not violate a law that prohibits the NTP from billing a patient who is an insured, participant, or enrollee in a managed care plan an amount greater than an applicable copayment, coinsurance, and deductible under the insured's, participant's, or enrollee's managed care plan or that imposes a requirement related to that prohibition.

(2) An NTP shall comply with Senate Bill 1264, 86th Legislature, Regular Session, 2019, and with related Texas Department of Insurance rules at 28 TAC Chapter 21, Subchapter OO, §§21.4901 -21.4904 (relating to Disclosures by Out-of-Network Providers) to the extent this subchapter applies to the NTP.

(d) All citations in these sections to statutes or regulations include those statutes or regulations as amended.

(e) An NTP shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

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Karen Ray

Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 289. RADIATION CONTROL SUBCHAPTER F. LICENSE REGULATIONS

25 TAC §§289.252, 289.256, 289.257

The Executive Commissioner of the Health and Human Services Commission (HHSC), on behalf of the Department of State Health Services (DSHS), proposes amendments to §289.252, concerning Licensing of Radioactive Material; §289.256, concerning Medical and Veterinary Use of Radioactive Material; and §289.257, concerning Packaging and Transportation of Radioactive Material.

BACKGROUND AND PURPOSE

The purpose of the amendments to §§289.252, 289.256, and 289.257 is to comply with compatibility requirements of the United States Nuclear Regulatory Commission (NRC), to which Texas is subject as an Agreement State. The amendments update NRC information and are the result of the NRC's adoption of rules related to the reporting and notification requirements for a medical event for permanent implant brachytherapy and the training for radiation safety officers, associate radiation safety officers, authorized medical physicists, authorized nuclear pharmacists, teletherapy or medical physicists, authorized users, and nuclear pharmacists. The amendments allow associate radiation safety officers to be named on a medical license and several clarifying amendments; and exempt certain board-certified individuals from certain training and experience requirements (i.e., "grandfather" these individuals).

Other amendments to §§289.252, 289.256, and 289.257 clarify terms and conditions of licenses for medical use of radioactive material, establish new definitions, update license application processes, and update facility radiation protection programs. The amendments also include changes to update, correct, improve, or clarify rule citation references, terminology, language and format consistency, grammar, and minor typographical and formatting errors.

SECTION-BY-SECTION SUMMARY

The term "department" replaces the former term "agency" throughout §§289.252, 289.256, and 289.257 for consistency with the use of "department" in 25 Texas Administrative Code.

The use of "%" is changed to "percent" throughout §§289.252, 289.256, and 289.257 to correct terminology.

The use of the term "including, but not limited to" removes "but not limited to" throughout §289.252 and §289.256 for clarity.

The use of the numbers "1 - 10" read as words "one - ten" throughout §289.252 and §289.257 to correct terminology.

The use of the words "prior to" and changed to "before" throughout §289.252, 289.256, and 289.257 for clarity.

Amendments to §289.252 make editorial updates for the use of "and/or" and make changes to either "and" or "or" where possible based on NRC compatibility requirements. Changes are made in §289.252(a)(2)(A) and (a)(2)(A)(iv); (e)(9); (f)(3)(B) and (f)(3)(J); (s)(4)(E)(i)(II); (t)(1) and (2); (u)(1) and (2); (y)(4); and (gg)(7)(B).

New §289.252(a)(2)(A)(i) adds a reference to §289.253 that was previously omitted from the purpose subsection. Subsequent clauses are renumbered.

Section 289.252(b)(2) removes the relating to reference for §289.253 as it is used earlier in section.

New §289.252(d)(4) is added for clarification as "main site" is not defined in the rule. Subsequent paragraphs are renumbered.

Two changes are made to §289.252(d) renumbered (8) to correct the name of the "Texas Board of Professional Engineers and Land Surveyors" and a rule reference.

In §289.252(d) renumbered (9)(C), the word "Texas" is added in front of "Government Code" to properly state the name of the Code.

In §289.252(d) renumbered (14), the rule reference to paragraph (8) is changed to paragraph (9) due to renumbering in the subsection.

A correction in word usage is made in §289.252(d) renumbered (15)(A) from "material" to "materially."

In §289.252(d) renumbered (16), the rule reference to paragraphs (1) - (7) is changed to paragraphs (1) - (8) due to the subsequent renumbering in the subsection.

In §289.252(e)(10), the rule reference to subsection (d)(14) is changed to subsection (d)(15) due to renumbering in subsection (d).

Wording is removed from §289.252(e)(11) to match the wording in the Business and Commerce Code, Chapter 71, and the name is corrected to include the word "Texas."

In §289.252(f), the term "Radiation safety officer" is changed to "RSO" as the term is used previously in the rule.

To maintain rules compatible with NRC language, the rule language that currently reads "licenses for broad scope authorization" is changed to read "licenses of broad scope" in §289.252(h).

Six new paragraphs are added as §289.252(h)(1) - (6) to replace previous paragraphs (1) - (3), which are being deleted in order for the rule language to be consistent with NRC language.

The words "under §289.256 of this title" are added to §289.252(r) to correctly reference the medical use rule.

A rule reference to United States Food and Drug Administration rules in Title 21 of the Code of Federal Regulation is corrected in §289.252(r)(1)(A)(i).

Wording is removed from §289.252(r)(3)(E)(i) based on requirements for compatibility with NRC regulations.

To maintain rules that are compatible with the NRC, new §289.252(r)(4) is added regarding labeling requirements. The subsequent paragraph is renumbered.

In §289.252(x)(9), the word "shall" is changed to "may" as "shall" is overly restrictive on DSHS.

In §289.252(x)(10), in order to maintain proper formatting, a new subparagraph (A) is created using existing language. In addition, new §289.252(x)(10)(B) is added as requested by the NRC regarding test results that exceed permissible concentrations at the time of generator elution.

Rule references are corrected in §289.252(z)(1) due to the renumbering in subsection (d).

In §289.252(z)(2), the word "Texas" is added in front of "Government Code" to properly state the name of the Code.

In §289.252(aa)(1), the rule reference to subsection (d)(1) - (3) is changed to subsection (d)(1) - (4) due to the addition of a new paragraph (4) in subsection (d).

A rule reference is corrected in §289.252(gg)(4)(A)(iii) and (v) from paragraph (5) to paragraph (6) as the original text referenced the wrong paragraph.

A rule reference is corrected in §289.252(gg)(6)(D) from paragraph (4) to paragraph (3) as the original text referenced the wrong paragraph.

In §289.252(gg)(7), the rule reference is corrected from §289.252(mm) to subsection (mm).

To maintain rules that are compatible with the NRC, §289.252(gg)(7)(C)(iii) is deleted regarding restricted areas of buried waste. The subsequent clause is renumbered.

Wording is changed in §289.252(ii)(3)(B)(ii) as requested by the NRC to meet compatibility requirements in referencing DSHS as the rule authority.

As required by the NRC, changes are made to §289.252(ii)(5)(C)(i) and (ii) to update NRC facility information and names.

A change is made in §289.252(ii)(6)(A)(vii) for a rule reference to the Atomic Energy Act, which corrects a typographical error.

A change is made in §289.252(ii)(6)(B)(v) to correct the term "drivers license" to "driver's license" for clarity.

To maintain rules that are compatible with the NRC, §289.252(ii)(10)(D)(ii), (iii), (iii)(I), (v), (vi), (vi)(II), (vii), and (viii)(II) wording is added regarding the list of individuals that have been approved for unescorted access.

As required by the NRC, changes are made to §289.252(ii)(21)(A)(i)(I) to update an NRC program name.

The heading in §289.252(ii)(23) is changed from "Reporting of events" to read "Reporting of events during shipment" for clarity.

Wording is removed from §289.252(ii)(23)(G) as DSHS is to be notified, not the NRC, and to be consistent with the NRC rule.

Figure for 25 TAC §289.252(jj)(2) is used to determine financial assurance limits and has been revised to match the wording in Title 10, Code of Federal Regulations (CFR), Part 30, Appendix B. In the first row of the figure of radionuclides, the word "unknown"

is removed. In the second row of radionuclides, the words "radionuclide" and "than" are added.

The word "year end" is corrected to "year-end" in §289.252(jj)(3)(B)(iv), (5)(B)(ii)(I), and (6)(B)(iii)(III) for clarity.

The term "self guarantees" and "self guaranteeing" are corrected to "self-guarantees" and "self-guaranteeing" in §289.252(jj)(4), (4)(A), (4)(B)(i)(I), (4)(C), and (5)

A period is added to the end of the sentence at §289.252(jj)(6)(A) as it was previously omitted.

The words "and/or" is removed from §289.252(jj)(6)(C)(i) to match NRC language.

Figure for 25 TAC §289.252(jj)(10) is added to include the table in Title 10, CFR, Part 33, Section 33.100, Schedule A, regarding broad scope license limits.

Figure for 25 TAC §289.252(mm) for record retention requirements is replaced to correctly reflect the wording used in §289.252(ii)(10)(D)(viii)(II). In the row referencing (ii)(10)(D)(viii)(II), the name of records/documents is changed to include "the list of individuals that have been approved for unescorted access."

In §289.256(b)(3), the acronym "CFR" is added for the first-time reference of the Code of Federal Regulations.

New §289.256(b)(4) is added to the subsection on Scope because Licensed Medical Physicist requirements are in 22 Texas Administrative Code (TAC), Chapter 160.

A new definition for "Associate radiation safety officer" is added in §289.256(c)(3) as required by the NRC for compatibility. The paragraphs are subsequently renumbered.

In §289.256(c), renumbered (4)(B)(i) the term "United States Nuclear Regulatory Commission" is removed and the acronym "NRC" is used as the term is used in the new previous paragraph (3).

Periods are added to the end of the sentences at §289.256(c)(4)(C) and §289.256(ff)(4) as they were previously omitted.

To maintain rules compatible with the NRC language that currently reads "licenses for broad scope authorization," the rule language is changed to read "licenses of broad scope." Changes were made in §289.256(c)(5)(B)(iii), (c)(6)(A)(ii)(III) and (IV), and (c)(6)(B)(iii)(III) and (IV); and (i) and (i)(3)(B).

The words "subsection" and the word "and" are added to §289.256(c)(6)(A)(i) for correct usage within the section and to match NRC language.

A new definition for "Ophthalmic physicist" is added as §289.256(c)(19) as required by the NRC for compatibility. The paragraphs are subsequently renumbered.

DSHS staff have opted to add the definition for "Patient intervention" as new §289.256(c)(22) since it is provided in NRC rule. The paragraphs continue to be subsequently renumbered.

In §289.256(c) renumbered (24), the words "or a radiation safety officer" are changed to read "an RSO, or an ARSO" in the definition for "Preceptor" as required by NRC compatibility requirements.

The definition of "Technologist" in §289.256(c) renumbered (31) is revised due to changes in terminology in §289.256(p) and to be consistent with NRC language.

The word "and" is removed from §289.256(c) renumbered (36)(A) in the definition for "Type of use" to match NRC language.

To maintain rules that are compatible with the NRC and because a new subparagraph is being added, the word "and" is removed from §289.256(c)(36)(E); a semicolon and the word "or" are added to §289.256(c)(36)(F); and new subparagraph (G) is added due to additional information being added in subsection (q).

In §289.256(d)(2)(A), the words "Code of Federal Regulations (CFR)" are removed and replaced with "CFR" as the acronym was already defined in §289.256(b)(3).

In §289.256(f)(2), the words "radiation safety officer (RSO)" are removed and replaced with "RSO" as the acronym was already defined in new §289.256(c)(3).

Due to NRC compatibility requirements, the subsection is changed in §289.256(f)(3)(C)(i), the words "if applicable" are added to (f)(3)(C)(iii), the word "and" is removed from (f)(3)(C)(iv), a new clause (v) is added, former clause (v) is renumbered to (vi) due to the addition of the new clause (v), former clause (v) is subsequently renumbered, and a new clause (vii) is added.

Due to renumbering in §289.256(c), rule references are changed in §289.256(f)(3)(C)(i), (ii), (iii), and (iv).

The word "and" is removed from §289.256(f)(4) and replaced with a period, due to the deletion of paragraph (5). The information in paragraph (5) is already covered in §289.252(e)(9).

To maintain rules that are compatible with the NRC, the title in §289.256(g) is changed from "Radiation safety officer" to "Authority and responsibilities for the radiation protection program." In addition, new paragraphs (1) and (2) are added and the subsequent paragraphs are renumbered.

Changes in §289.256(g) renumbered (4), (5), and (7), are made to the rule references due to renumbering and new paragraphs being added within subsection (g).

Changes to §289.256(g)renumbered (7) are made regarding user references in subsections (h) and (m) and agency notification requirements in subsection (r)(5) to be compatible with NRC language.

An additional change is made in §289.256(g)(7) to designate a reference change to the records/documents subsection. The records/document subsection is changed from subsection (www) to (xxx). The reference to the records/document section is corrected in the remaining subsections for §289.256.

New §289.256(g)(8) and (9) are added as required by the NRC to maintain compatibility requirements regarding appointing temporary radiation safety officers and records maintenance.

Because of the addition of "associate radiation safety officer", the rule language is revised and added to §289.256(h), (h)(2)(A)(ii), (h)(2)(B), (h)(3)(A) and (B), and (h)(4) to be compatible with NRC rules.

In §289.256(h)(1), a reference is changed due to renumbering within the subsection, and in §289.256(h)(1) and (h)(1)(A) and (B) language is changed to comply with NRC compatibility.

Restructuring within the following paragraphs and minor wording changes are being done to match the current structure and wording in NRC rules. Changes occur in §289.256(h)(2) and

(3), (j)(2), (k)(2), (gg)(3), (jj)(3), (nn)(2), (oo)(3), (pp)(3), (qq)(1), (zz)(2), (aaa)(2), (ggg), and (ttt)(2).

Language in §289.256(h)(2)(A)(ii)(II); and (3)(A), (B), and (C) is amended regarding instrument checks and certification and experience requirements as required to meet NRC compatibility.

To be consistent with NRC rule language and with DSHS rule language new §289.256(h)(2)(B) is added, which replaces old (h)(5) that is being deleted.

Language is edited in §289.256(j), (j)(1), (j)(1)(B)(i), (j)(2), (j)(2)(B), (j)(3), (k)(1), and (k)(2)(B) to be compatible with NRC rule.

Language regarding training is added and deleted as required by NRC for compatibility throughout §289.256(l). Paragraphs within subsection (l) are subsequently renumbered.

In §289.256(m), rule references are corrected for recentness of training to be compatible with the NRC rule.

In §289.256(p) and (p)(7)(A), the terminology is corrected to read "remote afterloader units" instead of "remote afterloader control brachytherapy units."

Section 289.256(p)(9) is deleted as the language does not exist in the corresponding NRC rule text. Paragraphs are subsequently renumbered.

Language regarding other medical or veterinary uses of radioactive material is revised in §289.256(q) and added in §289.256(q) new (1) and (2) to maintain rules that are compatible with the NRC.

To maintain rules that are compatible with the NRC, language is edited and added in §289.256(r); (r)(2); throughout (r)(2)(B); (r)(2)(E), (F), and (G); new (r)(2)(H) and (I); and throughout new (r)(3) - (5) regarding license amendments and notifications.

A change in §289.256(r)(2)(C) is made to correct a rule reference from (g)(5) to (g)(7) due to renumbering within subsection (g).

Section 289.256(r)(3) is deleted as the information is now covered in the new paragraph (3).

As requested by the NRC for purposes of compatibility, §289.256(t)(1)(A) is deleted, and subparagraph (B) is edited and moved to (t)(1).

The formatting in §289.256(t)(2)(A), (B), (C), (D), (E), and renumbered (G) is edited to match the NRC rule structure.

To maintain rules compatible with the NRC, new §289.256(t)(2)(F) is added regarding permanent implant brachytherapy; §289.256(t)(2)(G)(ii) is revised to read "(or the total dose), and the date;" and new §289.256(t)(3) is added regarding a written revision to an existing written directive. Subsequent paragraphs are renumbered.

In §289.256(t)(5)(A), the word "ensure" is deleted and replaced with "provide high confidence;" the rule reference in (5)(B)(iv) is corrected; and new clauses (v) and (vi) are added regarding a medical event and for permanent implant brachytherapy as requested by the NRC for compatibility purposes.

A revision is made to §289.256(u)(1) to correctly state the proper rule reference, which was previously omitted.

The words "positron emission tomography (PET)" are deleted and replaced with "PET" in §289.256(x)(2)(B)(iii) as the acronym is defined earlier in the rule.

To maintain rules that are compatible with the NRC, §289.256(y) is edited and split to create a new paragraph (1), which also contains revisions; paragraphs (1) and (2) are revised to become subparagraphs (A) and (B) with additional edits; paragraphs (3) - (5) are renumbered to be subparagraphs (C) - (E); and new paragraphs (2) and (3) are added.

In §289.256(ff)(1)(A), the rule reference is corrected to §289.252(r) to be more specific.

The rule reference in §289.256(ff)(2)(B) is changed due to renumbering within subsection (jj).

In §289.256(ff)(2)(C), the rule references are rearranged to place them in the proper order in which they occur.

Revisions are made to §289.256(gg)(1) and (1)(A) regarding training for uptake, dilution, and excretion studies, to meet NRC compatibility requirements. Additional NRC changes are made in §289.256(gg)(3) new (B) and (B)(i); and a new clause (B)(ii) is added and old language is deleted.

In §289.256(gg)(3)(B)(i), the rule references are rearranged to place them in the proper order in which they occur.

In §289.256(hh)(1)(A), the rule reference is corrected to §289.252(r) to be more specific.

The rule reference in §289.256(hh)(2)(B) is changed due to renumbering within subsection (jj).

The language in §289.256(hh)(2)(C) is revised to match the equivalent NRC rule language.

To maintain rules that are compatible with the NRC, revisions are made in §289.256(ii)(2) and a new paragraph (5) has been added regarding permissible molybdenum-99, strontium-82, and strontium-85 concentrations.

As requested by the NRC for purposes of compatibility, revisions are made to §289.256(jj)(1) and (jj)(1)(A) regarding training for imaging and localization studies.

The rule reference in §289.256(jj)(2) is changed due to renumbering within the subsection.

To maintain rules that are compatible with the NRC, revisions are made in §289.256(jj)(3)(A)(ii), (jj)(3)(B), and (jj)(3)(B)(i); and a new clause (B)(ii) is added and old language is deleted.

Revisions are made to §289.256(kk) regarding the use of unsealed radioactive material that requires a written directive as requested by the NRC for purposes of compatibility.

In §289.256(kk)(1)(A), the rule reference is corrected to §289.252(r) to be more specific.

In §289.256(kk)(2)(C), the rule references are rearranged to place them in the proper order in which they occur.

Rule references are corrected in §289.256(nn)(1) and (1)(A) regarding training for use of unsealed radioactive material that requires a written directive. Other changes throughout §289.256(nn)(1) and (2) are made to due compatibility requirements with the NRC.

In §289.256(oo)(1) and (2), rule references are corrected regarding training for the oral administration of specific quantities of sodium iodide I-131. Additional revisions to (oo)(1), (oo)(3)(B), and (oo)(3)(B)(i); and the addition of (oo)(3)(B)(ii) are made to maintain rules compatible with the NRC.

The rule references in §289.256(oo)(3)(A)(ii) and (oo)(3)(B)(i) are changed due to restructuring within subsection (nn).

Rule references are corrected in §289.256(pp)(1) due to restructuring within the subsection regarding training for the oral administration of certain quantities of sodium iodide I-131. Other changes throughout §289.256(pp)(1) and (pp)(3)(B); and the addition of (pp)(3)(B)(ii) are made to due compatibility requirements with the NRC.

The rule references in §289.256(pp)(2) and (pp)(3)(A)(ii) are changed due to restructuring within subsection (nn).

To maintain rules that are compatible with the NRC, revisions are made throughout §289.256(qq)(1) and (2) regarding training for the parenteral administration of unsealed radioactive material requiring a written directive.

The rule reference in §289.256(qq)(1)(A) is changed due to restructuring within subsection (nn).

Revisions are made in §289.256(rr), (rr)(1), and (rr)(2), regarding use of sealed sources for manual brachytherapy as required by NRC compatibility.

Throughout §289.256(xx), language is being added, deleted, and revised regarding strontium-90 sources for ophthalmic treatments to be consistent with NRC language as required.

To maintain rules that are compatible with the NRC, revisions are made, and new language is added throughout §289.256(zz) regarding training for use of manual brachytherapy sealed sources.

In §289.256(aaa) renumbered (3) is revised to meet NRC compatibility requirement and the rule references are rearranged to place them in the proper order in which they occur.

In §289.256(bbb) regarding use of sealed sources and medical devices for diagnoses, paragraph (1) is revised, new paragraphs (2) and (3) are added, and former paragraph (2) is renumbered to (4) with revisions to be consistent with NRC language and rule change requirements.

Section 289.256(ccc), regarding training for use of sealed sources for diagnosis, is revised and additional language is added as a new paragraph (2) with the subsequent paragraphs being renumbered to comply with NRC rule compatibility requirements.

Throughout §289.256(ddd) language is revised and added regarding the use of a sealed source in a remote afterloader unit, teletherapy unit, or gamma stereotactic radiosurgery unit to comply with NRC rule compatibility requirements.

Numerous changes are made to §289.256(ggg) regarding safety procedures and instructions for remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units, including revising, restructuring, and adding three paragraphs, and the correcting rule references to be consistent with NRC language requirements.

Minor changes are made in §289.256(iii)(1), (1)(A), and (1)(B) regarding dosimetry equipment to correctly match NRC language and punctuation usage.

In §289.256(ppp)(5), a rule reference is corrected as it was previously wrong.

Throughout §289.256(rrr) language is revised and added regarding full-inspection servicing for teletherapy and gamma stereo-

tactic radiosurgery units to maintain rules that are compatible with the NRC as required.

In §289.256(ttt)(1), an error to a rule reference is corrected.

Throughout §289.256(ttt) language is revised and added regarding training for use of remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units to maintain rules that are compatible with the NRC as required.

To maintain rules that are compatible with the NRC, revisions are made and new language added throughout §289.256(uuu)(1) regarding report and notification of a medical event. A new paragraph (2) is added and subsequent paragraphs are renumbered. Additionally, revisions are made in §289.256(uuu)(3) and (8)(B).

A change is made in §289.256(uuu)(5)(B) from "and/or" to "and" for consistency.

Changes are made to §289.256(vvv)(6)(B) regarding the report and notification of a dose to an embryo/fetus or nursing child as required by NRC compatibility.

New §289.256(www) is added regarding report and notification for an eluate exceeding permissible molybdenum-99, strontium-82, and strontium-85 concentrations to be consistent with NRC rule language requirements.

Section 289.256(www) is renumbered to §289.256(xxx) due to the addition of the new language required by NRC.

Figure for 25 TAC §289.256(www) is revised and replaced with the figure for 25 TAC §289.256(xxx) due to the renumbering of the subsections and changes made to the figure due to NRC compatibility requirements. Revisions to the figure include the deletion of records of leak tests for specific devices and sealed sources; the deletion of records relating to the authority of RSO; and the addition of three categories in §289.256(g)(9) relating to actions taken by licensee's management; authority, duties, and responsibilities of the RSO and the RSO's agreement to implement the radiation safety program; and document appointing the ARSO. Additional changes to the figure for 25 TAC §289.256(xxx) include revisions of the name of records/documents for §289.256(ii)(4), (uu)(2), (xx)(3), (ggg)(7), and (rrr)(3) to correctly match the language used in rule text. A new §289.256(ggg)(6) reference is added for written safety and operating procedures; and the former (ggg) is changed to (ggg)(7) with the time interval being changed to three years.

Rule references are corrected in §289.257(b)(2) in addition to revisions that are made to be consistent with NRC language.

In §289.257(d)(25), the definition for "Industrial package (IP)" is deleted as there is no reference to industrial packages in this rule. Subsequent paragraphs are renumbered.

Section §289.257(g) is revised to provide DSHS rule references instead of NRC rule references to maintain rules that are compatible with the NRC.

The name of a branch of the NRC is revised in §289.257(i)(1)(C)(iii) as requested by the NRC for compatibility and to correct and update information.

Section 289.257(i)(2) is removed regarding previously approved packages as this specific requirement falls under the authority of the NRC only. In addition, §289.257(i)(3) is deleted per NRC compatibility requirements. Subsequent paragraphs are renumbered.

Revisions to §289.257(i) renumbered (2)(B) and (D) are made to be consistent with NRC rule language requirements and to correct rule references.

In §289.257(i) renumbered (3)(C)(ii), the spelling of the word "hydrogenous" is corrected.

Figure for 25 TAC §289.257(i)(5)(E)(i) is replaced with the figure for 25 TAC §289.257(i)(3)(E)(i) to reflect the new name due to the renumbering of the paragraphs within the subsection.

Figure for 25 TAC §289.257(i)(5)(E)(iii) is replaced with the figure for 25 TAC §289.257(i)(3)(E)(iii) to reflect the new name due to the renumbering of the paragraphs within the subsection and two corrections are made within the figure due to the name/renumbering change.

Figure for 25 TAC §289.257(i)(6)(E)(i) is replaced with the figure for 25 TAC §289.257(i)(4)(E)(i) to reflect the new name due to the renumbering of the paragraphs within the subsection.

Section 289.257(k)(1) - (3) are deleted regarding preliminary determinations as they fall under the authority of the NRC only. As a result, the remaining paragraph becomes part subsection (k).

Section 289.257(l)(11) is deleted regarding routine determinations as the requirement in this paragraph falls under the authority of the NRC only.

Section §289.257(o)(1) is revised regarding records that are kept for three years after shipment to maintain rules that are compatible with the NRC.

The language in §289.257(o)(1)(J) is revised to be consistent with the NRC language.

Section 289.257(o)(2) is deleted as the requirement in this paragraph falls under the authority of the NRC only. Subsequent paragraphs are renumbered.

The words "certificate of compliance (CoC)" are removed from §289.257(o) renumbered (2) as the acronym is defined previously in the rule.

In §289.257(q)(4)(A)(iii), the words "Division of Security Policy" are removed to be consistent with NRC program name changes.

In §289.257(q)(4)(D), the words "make, maintain and" are removed for consistency throughout DSHS radiation rules.

The name of a program of the NRC is revised in §289.257(q)(7)(A) as requested by the NRC for compatibility and to correct and update information.

FISCAL NOTE

Donna Sheppard, DSHS Chief Financial Officer, has determined that for each year of the first five years that the rules will be in effect, enforcing or administering the rules does not have foreseeable implications relating to costs or revenues of state or local governments.

GOVERNMENT GROWTH IMPACT STATEMENT

DSHS has determined that during the first five years that the rules will be in effect:

- (1) the proposed rules will not create or eliminate a government program;
- (2) implementation of the proposed rules will not affect the number of DSHS employee positions;

- (3) implementation of the proposed rules will result in no assumed change in future legislative appropriations;
- (4) the proposed rules will not affect fees paid to DSHS;
- (5) the proposed rules will not create a new rule;
- (6) the proposed rules will expand existing rules;
- (7) the proposed rules will not change the number of individuals subject to the rules; and
- (8) the proposed rules will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Donna Sheppard has also determined that there will be no significant adverse economic impact on small businesses, micro-businesses, or rural communities required to comply with the rules as proposed. Small businesses, micro-businesses, and rural communities will be required to make minor changes to their business practices to comply with the rules.

LOCAL EMPLOYMENT IMPACT

The proposed rules will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code, §2001.0045 does not apply to these rules because these rules are necessary to protect the health, safety, and welfare of the residents of Texas.

PUBLIC BENEFIT AND COSTS

Luis Morales, Interim Associate Commissioner, Consumer Protection Division, has determined that for each year of the first five years the rules are in effect, the public will benefit from the adoption of the rules. The public benefit anticipated as the result of enforcing or administering the rules is to ensure continued enhanced protection of the public, patients, workers, and the environment from unnecessary exposure to radiation by ensuring that the rules are understandable, effective, specific, and harmonious with NRC rules.

Donna Sheppard has also determined that for the first five years the rules are in effect, there are no anticipated economic costs to persons who are required to comply with the proposed rules because those persons are already required to follow NRC regulations.

TAKINGS IMPACT ASSESSMENT

DSHS has determined that the proposal does not restrict or limit an owner's right to his or her property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to Brian Vamvakias, Radiation Unit Manager, Policy, Standards, and Quality Assurance Section, Consumer Protection Division, DSHS, Mail Code 1987, P.O. Box 149347, Austin, Texas 78714-9347; Exchange Building, 8407 Wall Street, Austin, Texas 78754 (512) 834-6655 or by email to CPDRuleComments@dshs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on

the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R035" in the subject line.

STATUTORY AUTHORITY

The amendments are authorized by Texas Health and Safety Code, Chapter 401 (the Texas Radiation Control Act), which provides for DSHS radiation control rules and regulatory program to be compatible with federal standards and regulation; §401.051, which provides the required authority to adopt rules and guidelines relating to the control of sources of radiation; §401.052, which provides authority for rules that provide for transportation and routing of radioactive material and waste in Texas; §401.103, which provides authority for licensing and registration for transportation of sources of radiation; §401.104, which provides for rulemaking authority for general or specific licensing of radioactive material and devices or equipment using radioactive material; §401.224, which provides rulemaking authority relating to the packaging of radioactive waste; Chapter 401, Subchapter J, which authorizes enforcement of the Act; Texas Government Code, §531.0055; and Texas Health and Safety Code, §1001.075, which authorizes the Executive Commissioner of HHSC to adopt rules and policies for the operation and provision of health and human services by DSHS and for the administration of Texas Health and Safety Code, Chapter 1001.

The amendments also implement Texas Health and Safety Code, Chapters 401 and 1001; and Texas Government Code, Chapter 531.

§289.252. *Licensing of Radioactive Material.*

- (a) Purpose. The intent of this section is as follows.

(1) This section provides for the specific licensing of radioactive material.

(2) Unless otherwise exempted, no person shall manufacture, produce, receive, possess, use, transfer, own, or acquire radioactive material except as authorized by the following:

(A) a specific license issued in accordance with this section and ~~and/or~~ any of the following sections:

(i) §289.253 of this title (relating to Radiation Safety Requirements for Well Logging Service Operations and Tracer Studies);

(ii) ~~[(+)]~~ §289.255 of this title (relating to Radiation Safety Requirements and Licensing and Registration Procedures for Industrial Radiography);

(iii) ~~[(+)]~~ §289.256 of this title (relating to Medical and Veterinary Use of Radioactive Material);

(iv) ~~[(+)]~~ §289.258 of this title (relating to Licensing and Radiation Safety Requirements for Irradiators); or ~~and/or~~

(v) ~~[(+)]~~ §289.259 of this title (relating to Licensing of Naturally Occurring Radioactive Material (NORM)); or

(B) a general license or general license acknowledgment issued in accordance with §289.251 of this title (relating to Exemptions, General Licenses, and General License Acknowledgements).

(3) A person who manufactures, produces, receives, possesses, uses, transfers, owns, or acquires radioactive materials before ~~prior to~~ receiving a license is subject to the requirements of this chapter.

(b) Scope. In addition to the requirements of this section, the following additional requirements are applicable.

(1) All licensees, unless otherwise specified, are subject to the requirements in the following sections:

(A) §289.201 of this title (relating to General Provisions for Radioactive Material);

(B) §289.202 of this title (relating to Standards for Protection Against Radiation from Radioactive Materials);

(C) §289.203 of this title (relating to Notices, Instructions, and Reports to Workers; Inspections);

(D) §289.204 of this title (relating to Fees for Certificates of Registration, Radioactive Material Licenses, Emergency Planning and Implementation, and Other Regulatory Services);

(E) §289.205 of this title (relating to Hearing and Enforcement Procedures); and

(F) §289.257 of this title (relating to Packaging and Transportation of Radioactive Material).

(2) Licensees engaged in well logging service operations and tracer studies are subject to the requirements of §289.253 of this title ~~[(relating to Radiation Safety Requirements for Well Logging Service Operations and Tracer Studies)]~~.

(3) Licensees engaged in industrial radiographic operations are subject to the requirements of §289.255 of this title.

(4) Licensees using radioactive material for medical or veterinary use are subject to the requirements of §289.256 of this title.

(5) Licensees using sealed sources in irradiators are subject to the requirements of §289.258 of this title.

(6) Licensees possessing or using naturally occurring radioactive material are subject to the requirements of §289.259 of this title.

(c) Types of licenses. Licenses for radioactive materials are of two types: general and specific.

(1) General licenses provided in §289.251 and §289.259 of this title are effective without the filing of applications with the department ~~[agency]~~ or the issuance of licensing documents to the particular persons, although the filing of an application for acknowledgment with the department ~~[agency]~~ may be required for a particular general license. The general licensee is subject to any other applicable portions of this chapter and any conditions or limitations of the general license.

(2) Specific licenses require the submission of an application to the department ~~[agency]~~ and the issuance of a licensing document by the department ~~[agency]~~. The licensee is subject to all applicable portions of this chapter as well as any conditions or limitations specified in the licensing document.

(d) Filing application for specific licenses. The department ~~[agency]~~ may, at any time after the filing of the original application, require further statements in order to enable the department ~~[agency]~~ to determine whether the application should be denied or the license should be issued.

(1) Applications for specific licenses shall be filed in a manner prescribed by the department ~~[agency]~~.

(2) Each application shall be signed by the chief executive officer or other individual delegated the authority to manage, direct, or administer the licensee's activities.

(3) An application for a license may include a request for a license authorizing one or more activities. The department ~~[agency]~~ may require the issuance of separate specific licenses for those activities.

(4) An application for a license may include a request for more than one location of use on the license. The department may require the issuance of a separate license for additional locations that are more than 30 miles from the main site specified on a license.

~~(5) [(4)]~~ Each application for a specific license, other than a license exempted from §289.204 of this title, shall be accompanied by the fee prescribed in §289.204 of this title.

~~(6) [(5)]~~ Each application shall be accompanied by a completed RC Form 252-1 (Business Information Form).

~~(7) [(6)]~~ Each applicant shall demonstrate to the department ~~[agency]~~ that the applicant is financially qualified to conduct the activity requested for licensure, including any required decontamination, decommissioning, reclamation, and disposal before the department ~~[agency]~~ issues a license. Each licensee shall demonstrate to the department ~~[agency]~~ that it remains financially qualified to conduct the licensed activity before a license is renewed. Methods for demonstrating financial qualifications are specified in subsection (jj)(8) of this section. The requirement for demonstration of financial qualification is separate from the requirement specified in subsection (gg) of this section for certain applicants or licensees to provide financial assurance.

~~(8) [(7)]~~ If facility drawings submitted in conjunction with the application for a license are prepared by a professional engineer or engineering firm, those drawings shall be final and shall be signed, sealed and dated in accordance with the requirements of the Texas Board of Professional Engineers and Land Surveyors, Title 22, Part 6, Texas Administrative Code (TAC), Chapter 137 ~~[434]~~.

~~(9) [(8)]~~ Applications for licenses shall be processed in accordance with the following time periods.

(A) The first period is the time from receipt of an application by the department ~~[agency]~~ to the date of issuance or denial of the license or a written notice outlining why the application is incomplete or unacceptable. This time period is 60 days.

(B) The second period is the time from receipt of the last item necessary to complete the application to the date of issuance or denial of the license. This time period is 30 days.

(C) These time periods are exclusive of any time period incident to hearings and post-hearing activities required by the Texas Government Code, Chapter 2001.

~~(10) [(9)]~~ Except as provided in this paragraph, an application for a specific license to use radioactive material in the form of a sealed source or in a device that contains the sealed source shall:

(A) identify the source or device by manufacturer and model number as registered in accordance with subsection (v) of this section or with equivalent regulations of the United States Nuclear Regulatory Commission (NRC) or any agreement state, or for a source or a device containing radium-226 or accelerator-produced radioactive material registered in accordance with subsection (v) of this section; or

(B) contain the information specified in subsection (v)(3) - (4) of this section.

(11) [(40)] For sources or devices manufactured before October 23, 2012, that are not registered in accordance with subsection (v) of this section or with equivalent regulations of the NRC or any agreement state, and for which the applicant is unable to provide all categories of information specified in subsection (v)(3) - (4) of this section, the application shall include:

(A) all available information identified in subsection (v)(3) - (4) of this section concerning the source, and, if applicable, the device; and

(B) sufficient additional information to demonstrate that there is reasonable assurance that the radiation safety properties of the source or device are adequate to protect health and minimize danger to life and property. Such information shall include:

- (i) a description of the source or device;
- (ii) a description of radiation safety features;
- (iii) the intended use and associated operating experience; and
- (iv) the results of a recent leak test.

(12) [(41)] For sealed sources and devices allowed to be distributed without registration of safety information in accordance with subsection (v)(8)(A) of this section, the applicant shall supply only the manufacturer, model number, and radionuclide and quantity.

(13) [(42)] If it is not feasible to identify each sealed source and device individually, the applicant shall propose constraints on the number and type of sealed sources and devices to be used and the conditions under which they will be used, in lieu of identifying each sealed source and device.

(14) [(43)] Notwithstanding the provisions of §289.204(d)(1) of this title, reimbursement of application fees may be granted in the following manner.

(A) In the event the application is not processed in the time periods as stated in paragraph (9) [(8)] of this subsection, the applicant has the right to request of the director of the Radiation Control Program full reimbursement of all application fees paid in that particular application process. If the director does not agree that the established periods have been violated or finds that good cause existed for exceeding the established periods, the request will be denied.

(B) Good cause for exceeding the period established is considered to exist if:

- (i) the number of applications for licenses to be processed exceeds by 15 percent [(+5%)] or more the number processed in the same calendar quarter the preceding year;
- (ii) another public or private entity utilized in the application process caused the delay; or
- (iii) other conditions existed giving good cause for exceeding the established periods.

(C) If the request for full reimbursement authorized by subparagraph (A) of this paragraph is denied, the applicant may then request a hearing by appeal to the Commissioner of Health for a resolution of the dispute. The appeal will be processed in accordance with Title 1, TAC, Chapter 155, and the Formal Hearing Procedures, §§1.21, 1.23, 1.25, and 1.27 of this title.

(15) [(44)] Applications for licenses may be denied for the following reasons:

(A) any materially [material] false statement in the application or any statement of fact required under provisions of the Texas Radiation Control Act (Act);

(B) conditions revealed by the application or statement of fact or any report, record, or inspection, or other means that would warrant the department [agency] to refuse to grant a license on an application; or

(C) failure to clearly demonstrate how the requirements in this chapter have been addressed.

(16) [(45)] Action on a specific license application will be considered abandoned if the applicant does not respond within 30 days from the date of a request for any information by the department [agency]. Abandonment of such actions does not provide an opportunity for a hearing; however, the applicant retains the right to resubmit the application in accordance with paragraphs (1) - (8) [(4) - (7)] of this subsection.

(e) General requirements for the issuance of specific licenses. A license application will be approved if the department [agency] determines that:

(1) the applicant and all personnel who will be handling the radioactive material are qualified by reason of training and experience to use the material in question for the purpose requested in accordance with this chapter in such a manner as to minimize danger to occupational and public health and safety, life, property, and the environment;

(2) the applicant's proposed equipment, facilities, and procedures are adequate to minimize danger to occupational and public health and safety, life, property, and the environment;

(3) the issuance of the license will not be inimical to the health and safety of the public;

(4) the applicant satisfied any applicable special requirement in this section and other sections as specified in subsection (a)(2)(A) of this section;

(5) the radiation safety information submitted for requested sealed source(s) or device(s) containing radioactive material is in accordance with subsection (v) of this section;

(6) qualifications of the designated radiation safety officer (RSO) as specified in subsection (f) of this section are adequate for the purpose requested in the application;

(7) the applicant submitted adequate operating, safety, and emergency procedures;

(8) the applicant's permanent facility is located in Texas (if the applicant's permanent facility is not located in Texas, reciprocal recognition shall be sought as required by subsection (ee) of this section);

(9) the owner of the property is aware that radioactive material is stored or [and/or] used on the property, if the proposed facility is not owned by the applicant. The applicant shall provide a written statement from the owner, or from the owner's agent, indicating such. This paragraph does not apply to property owned or held by a government entity or to property on which radioactive material is used under an authorization for temporary job site use;

(10) there is no reason to deny the license as specified in subsections (d)(15) [(4)(14)] or (x)(9) of this section; and

(11) the applicant shall have a current registration with the Secretary of State to conduct business in the state, unless the applicant is exempt. All applicants using an assumed name in their application shall file an assumed name certificate [with the Secretary of State and/or

the office of the county clerk] as required under the Texas Business and Commerce Code, Chapter 71.

(f) RSO [~~Radiation safety officer~~].

(1) An RSO shall be designated for every license issued by the department [~~agency~~]. A single individual may be designated as RSO for more than one license if authorized by the department [~~agency~~].

(2) The RSO's documented qualifications shall include as a minimum:

(A) possession of a high school diploma or a certificate of high school equivalency based on the GED test;

(B) completion of the training and testing requirements specified in this chapter for the activities for which the license application is submitted; and

(C) training and experience necessary to supervise the radiation safety aspects of the licensed activity.

(3) Every licensee shall establish in writing the authority, duties, and responsibilities of the RSO and ensure that the RSO is provided sufficient authority, organizational freedom, time, resources, and management prerogative to perform the specific duties of the RSO which include[, but are not limited to,] the following:

(A) to establish and oversee operating, safety, emergency, and as low as reasonably achievable (ALARA) procedures, and to review them at least annually to ensure that the procedures are current and conform with this chapter;

(B) to oversee and approve all phases of the training program for operations and [~~and/or~~] personnel so that appropriate and effective radiation protection practices are taught;

(C) to ensure that required radiation surveys and leak tests are performed and documented in accordance with this chapter, including any corrective measures when levels of radiation exceed established limits;

(D) to ensure that individual monitoring devices are used properly by occupationally-exposed personnel, that records are kept of the monitoring results, and that timely notifications are made in accordance with §289.203 of this title;

(E) to investigate and cause a report to be submitted to the department [~~agency~~] for each known or suspected case of radiation exposure to an individual or radiation level detected in excess of limits established by this chapter and each theft or loss of source(s) of radiation, to determine the cause(s), and to take steps to prevent a recurrence;

(F) to investigate and cause a report to be submitted to the department [~~agency~~] for each known or suspected case of release of radioactive material to the environment in excess of limits established by this chapter;

(G) to have a thorough knowledge of management policies and administrative procedures of the licensee;

(H) to assume control and have the authority to institute corrective actions, including shutdown of operations when necessary in emergency situations or unsafe conditions;

(I) to ensure that records are maintained as required by this chapter;

(J) to ensure the proper storing, labeling, transport, use and disposal of sources of radiation, storage, and [~~and/or~~] transport containers;

(K) to ensure that inventories are performed in accordance with the activities for which the license application is submitted;

(L) to perform a physical inventory of the radioactive sealed sources authorized for use on the license every 6 months and make, maintain, and retain records of the inventory of the radioactive sealed sources authorized for use on the license every six [6] months, to include[, but not be limited to] the following:

(i) isotope(s);

(ii) quantity(ies);

(iii) activity(ies);

(iv) date inventory is performed;

(v) location;

(vi) unique identifying number or serial number; and

(vii) signature of person performing the inventory;

(M) to ensure that personnel are complying with this chapter, the conditions of the license, and the operating, safety, and emergency procedures of the licensee;

(N) to serve as the primary contact with the department [~~agency~~]; and

(O) to have knowledge of and ensure compliance with federal and state security measures for radioactive material.

(4) The RSO shall ensure that the duties listed in paragraph (3)(A) - (O) of this subsection are performed.

(5) The RSO shall be on site periodically, commensurate with the scope of licensed activities, to satisfy the requirements of paragraphs (3) and (4) of this subsection.

(6) The RSO, or a Site RSO designated on the license, shall be capable of physically arriving at the licensee's authorized use site(s) within a reasonable time of being notified of an emergency situation or unsafe condition. A Site RSO shall meet the qualifications in paragraph (2) of this subsection.

(7) Requirements for RSOs for specific licenses for broad scope authorization for research and development. In addition to the requirements in paragraphs (1) and (3) - (6) of this subsection, the RSO's qualifications for specific licenses for broad scope authorization for research and development shall include evidence of the following:

(A) a bachelor's degree in health physics, radiological health, physical science or a biological science with a physical science minor and 4 years of applied health physics experience in a program with radiation safety issues similar to those in the program to be managed;

(B) a master's degree in health physics or radiological health and 3 years of applied health physics experience in a program with radiation safety issues similar to those in the program to be managed;

(C) 2 years of applied health physics experience in a program with radiation safety issues similar to those in the program to be managed and one of the following:

(i) doctorate degree in health physics or radiological health;

(ii) comprehensive certification by the American Board of Health Physics;

(iii) certification by the American Board of Radiology in Nuclear Medical Physics;

(iv) certification by the American Board of Science in Nuclear Medicine in Radiation Protection; or

(v) certification by the American Board of Medical Physics in Medical Health Physics; or

(D) equivalent qualifications as approved by the department [agency].

(8) The qualifications in paragraph (7)(A) - (D) do not apply to individuals who have been adequately trained and designated as RSOs on licenses issued before [prior to] October 1, 2000.

(g) Duties and responsibilities of the Radiation Safety Committee (RSC). The duties and responsibilities of the RSC include [but are not limited to] the following:

(1) meeting as often as necessary to conduct business but no less than three [3] times a year;

(2) reviewing summaries of the following information presented by the RSO:

(A) over-exposures;

(B) significant incidents, including spills, contamination, or medical events; and

(C) items of non-compliance following an inspection;

(3) reviewing the program for maintaining doses ALARA, and providing any necessary recommendations to ensure doses are ALARA;

(4) reviewing the overall compliance status for authorized users;

(5) sharing responsibility with the RSO to conduct periodic audits of the radiation safety program;

(6) reviewing the audit of the radiation safety program and acting upon the findings;

(7) developing criteria to evaluate training and experience of new authorized user applicants;

(8) evaluating and approving authorized user applicants who request authorization to use radioactive material at the facility;

(9) evaluating new uses of radioactive material;

(10) reviewing and approving permitted program and procedural changes before [prior to] implementation; and

(11) having knowledge of and ensuring compliance with federal and state security measures for radioactive material.

(h) Specific licenses of [for] broad scope [authorization for multiple quantities or types of radioactive material for use in research and development].

(1) Types of specific licenses of broad scope.

(A) A "Type A specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of the radioactive material specified in the license, but not exceeding quantities specified in the license. The quantities specified are usually in the multicurie range.

(B) A "Type B specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of radioactive material specified in subsection (jj)(10) of this section. The possession limit for a Type B specific license of broad scope, if only one radionu-

clide is possessed thereunder, is the quantity specified for that radionuclide in subsection (jj)(10) of this section. If two or more radionuclides are possessed thereunder, the possession limit for each is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to the applicable quantity specified in subsection (jj)(10) of this section, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

(C) A "Type C specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of radioactive material specified in subsection (jj)(10) of this section. The possession limit for a Type C specific license of broad scope, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in subsection (jj)(10) of this section. If two or more radionuclides are possessed thereunder, the possession limit is determined for each as follows: For each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in subsection (jj)(10) of this section, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

(2) An application for a Type A specific license of broad scope will be approved if:

(A) the applicant satisfies the general requirements specified in subsection (e) of this section;

(B) the applicant has engaged in a reasonable number of activities involving the use of radioactive material; and

(C) the applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control, and accounting and management review that are necessary to assure safe operations, including:

(i) the establishment of a RSC composed of such persons as an RSO, a representative of management, and persons trained and experienced in the safe use of radioactive materials management to fulfill the duties and responsibilities specified in subsection (g) of this section;

(ii) the appointment of a full-time RSO meeting the requirements of subsection (f)(7) or (8) of this section who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiation safety matters; and

(iii) the establishment of appropriate administrative procedures to ensure:

(I) control of procurement and use of radioactive material;

(II) completion of safety evaluations of proposed uses of radioactive material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

(III) review, approval, and recording by the RSC of safety evaluations of proposed uses prepared in accordance with subclause (II) of this clause before use of the radioactive material.

(3) An application for a Type B specific license of broad scope will be approved if:

(A) the applicant satisfies the general requirements specified in subsection (e) of this section; and

(B) the applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control and accounting, and

management review that are necessary to assure safe operations, including:

(i) the appointment of an RSO who is qualified by training and experience in radiation protection, and who is available for advice and assistance on safety matters; and

(ii) the establishment of appropriate administrative procedures to ensure:

(I) control of procurement and use of radioactive material;

(II) completion of safety evaluations of proposed uses of radioactive material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

(III) review, approval, and recording by the RSO of safety evaluations of proposed uses prepared in accordance with sub-clause (II) of this clause before use of the radioactive material.

(4) An application for a Type C specific license of broad scope will be approved if:

(A) the applicant satisfies the general requirements specified in subsection (e) of this section;

(B) the applicant submits a statement that radioactive material will be used only by, or under the direct supervision of, individuals who have received:

(i) a college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering; and

(ii) at least 40 hours of training and experience in the safe handling of radioactive materials, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used; and

(C) the applicant has established administrative controls and provisions relating to procurement of radioactive material, procedures, record keeping, material control and accounting, and management review necessary to assure safe operations.

(5) An application filed pursuant to subsection (e) of this section for a specific license other than one of broad scope will be considered by the department as an application for a specific license of broad scope under this subsection if the applicable requirements of this subsection are satisfied.

(6) The following conditions apply to specific licenses of broad scope.

(A) Unless specifically authorized in accordance with a separate license, persons licensed under this subsection shall not:

(i) conduct tracer studies in the environment involving direct release of radioactive material;

(ii) receive, acquire, own, possess, use, transfer, or import devices containing 100,000 curies or more of radioactive material in sealed sources used for irradiation of materials;

(iii) conduct activities for which a specific license issued by the department in accordance with subsections (i) - (u) of this section and §289.255, §289.256, and §289.259 of this title as required;

(iv) add or cause the addition of radioactive material to any food, beverage, cosmetic, drug, or other product designed for ingestion or inhalation by, or application to, a human being; or

(v) commercially distribute radioactive materials.

(B) Each Type A specific license of broad scope issued under this subsection shall be subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's RSC.

(C) Each Type B specific license of broad scope issued under this subsection shall be subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's RSO.

(D) Each Type C specific license of broad scope issued under this subsection shall be subject to the condition that radioactive material possessed under the license may only be used by, or under the direct supervision of, individuals who satisfy the requirements of paragraph (4) of this subsection.

{(1) In addition to the requirements in subsection (e) of this section, a specific license for multiple quantities or types of radioactive material for use in research and development, not to include the internal or external administration of radiation or radioactive material to humans, will be issued if the agency approves the following documentation submitted by the applicant:}

{(A) that staff has substantial experience in the use of a variety of radioisotopes for a variety of research and development uses;}

{(B) of a full-time RSO meeting the requirements of subsection (f)(7) of this section;}

{(C) establishment of an RSC, including names and qualifications, with duties and responsibilities in accordance with subsection (g) of this section. The RSC shall be composed of an RSO, a representative of executive management, and 1 or more persons trained or experienced in the safe use of radioactive materials.}

{(2) Unless specifically authorized, persons licensed according to paragraph (1) of this subsection shall not conduct tracer studies involving direct release of radioactive material to the environment.}

{(3) Unless specifically authorized, in accordance with a separate license, persons licensed according to paragraph (1) of this subsection shall not:}

{(A) receive, acquire, own, possess, use, or transfer devices containing 100,000 curies (Ci) (3700 terabecquerels) or more of radioactive material in sealed sources used for irradiation of materials;}

{(B) conduct activities for which a specific license issued by the agency in accordance with subsections (i) - (u) of this section and §289.255, §289.256, and §289.259 of this title as required;}

{(C) add or cause the addition of radioactive material to any food, beverage, cosmetic, drug, or other product designed for ingestion or inhalation by, or application to, a human being; or}

{(D) commercially distribute radioactive material.}

(i) Specific licenses for introduction of radioactive material into products in exempt concentrations. No person may introduce radioactive material into a product or material knowing or having reason to believe that it will be transferred to persons exempt in accordance with §289.251 of this title except as specified with a license issued by the NRC.

(j) Specific licenses for commercial distribution of radioactive material in exempt quantities.

(1) Authority to transfer possession or control by the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source material, byproduct material, or naturally occurring and accelerator-produced radioactive material (NARM) whose subsequent possession, use, transfer, and disposal by all other persons are exempted from regulatory requirements may be obtained only from the United States Nuclear Regulatory Commission (NRC), Washington, DC 20555 in accordance with Title 10, Code of Federal Regulations (CFR), §32.18.

(2) Licenses issued in accordance with this subsection do not authorize the following:

(A) combining of exempt quantities of radioactive material in a single device;

(B) any program advising persons to combine exempt quantity sources and providing devices for them to do so; and

(C) the possession and use of combined exempt sources, in a single unregistered device, by persons exempt from licensing in accordance with §289.251(e)(2) of this title.

(k) Specific licenses for incorporation of byproduct material or NARM into gas and aerosol detectors. A specific license authorizing the incorporation of byproduct material or NARM into gas and aerosol detectors to be distributed to persons exempt from this chapter shall be issued only by the NRC in accordance with Title 10, CFR, §32.26.

(l) Specific licenses for the manufacture and commercial distribution of devices to persons generally licensed in accordance with §289.251(f)(4)(H) of this title.

(1) In addition to the requirements in subsection (e) of this section, a specific license to manufacture or commercially distribute devices containing radioactive material to persons generally licensed in accordance with §289.251(f)(4)(H) of this title or equivalent requirements of the NRC or any agreement state will be issued if the department [agency] approves the following information submitted by the applicant:

(A) the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reasonable assurance that:

(i) the device can be safely operated by persons not having training in radiological protection;

(ii) under ordinary conditions of handling, storage, and use of the device, the radioactive material contained in the device will not be released or inadvertently removed from the device, and it is unlikely that any person will receive in any period of one year a dose in excess of ten percent [40%] of the limits specified in §289.202(f) of this title; and

(iii) under accident conditions (such as fire and explosion) associated with handling, storage, and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the following organ doses:

(I) 15 rems to the whole body; head and trunk; active blood-forming organs; gonads; or lens of eye;

(II) 200 rems to the hands and forearms; feet and ankles; localized areas of skin averaged over areas no larger than 1 square centimeter (cm²); or

(III) 50 rems to other organs;

(B) procedures for disposition of unused or unwanted radioactive material;

(C) each device bears a durable, legible, clearly visible label or labels approved by the department [agency] that contain the following in a clearly identified and separate statement:

(i) instructions and precautions necessary to assure safe installation, operation, and servicing of the device (documents such as operating and service manuals may be identified in the label and used to provide this information);

(ii) the requirement, or lack of requirement, for leak testing, or for testing any "on-off" mechanism and indicator, including the maximum time interval for such testing, and the identification of radioactive material by isotope, quantity of radioactivity, and date of determination of the quantity; and

(iii) the information called for in one of the following statements, as appropriate, in the same or substantially similar form:

(I) For radioactive materials other than NARM, the following statement is appropriate:

Figure: 25 TAC §289.252(1)(1)(C)(iii)(I) (No change.)

(II) For NARM, the following statement is appropriate:

Figure: 25 TAC §289.252(1)(1)(C)(iii)(II) (No change.)

(III) The model and serial number and name of manufacturer or distributor may be omitted from this label provided they are elsewhere stated in labeling affixed to the device.

(D) Each device having a separable source housing that provides the primary shielding for the source also bears, on the source housing, a durable label containing the device model number and serial numbers, the isotope and quantity, the words, "Caution-Radioactive Material," the radiation symbol described in §289.202(z) of this title, and the name of the manufacturer or initial distributor.

(E) Each device meeting the criteria of §289.251(g)(1) of this title, bears a permanent (for example, embossed, etched, stamped, or engraved) label affixed to the source housing if separable, or the device if the source housing is not separable, that includes the words, "Caution-Radioactive Material," and, if practicable, the radiation symbol described in §289.202(z) of this title.

(F) The device has been registered in the Sealed Source and Device Registry.

(2) In the event the applicant desires that the device be required to be tested at intervals longer than 6 months, either for proper operation of the "on-off" mechanism and indicator, if any, or for leakage of radioactive material, or for both, the applicant shall include in the application sufficient information to demonstrate that the longer interval is justified by performance characteristics of the device or similar devices and by design features that have a significant bearing on the probability or consequences of radioactive material leakage from the device or failure of the "on-off" mechanism and indicator. In determining the acceptable interval for the test for radioactive material leakage, the department [agency] will consider information that includes[; ~~but is not limited to~~] the following:

(A) primary containment (sealed source capsule);

(B) protection of primary containment;

(C) method of sealing containment;

(D) containment construction materials;

(E) form of contained radioactive material;

- (F) maximum temperature withstood during prototype tests;
- (G) maximum pressure withstood during prototype tests;
- (H) maximum quantity of contained radioactive material;
- (I) radiotoxicity of contained radioactive material; and
- (J) operating experience with identical devices or similarly designed and constructed devices.

(3) In the event the applicant desires that the general licensee in accordance with §289.251(f)(4)(H) of this title or in accordance with equivalent regulations of the NRC or any agreement state, be authorized to mount the device, collect the sample to be analyzed by a specific licensee for radioactive material leakage, perform maintenance of the device consisting of replacement of labels, rust and corrosion prevention, and for fixed gauges, repair and maintenance of sealed source holder mounting brackets, test the "on-off" mechanism and indicator, or remove the device from installation, the applicant shall include in the application written instructions to be followed by the general licensee, estimated annual doses associated with such activity or activities, and bases for such estimates. The submitted information shall demonstrate that performance of such activity or activities by an individual untrained in radiological protection, in addition to other handling, storage, and use of devices in accordance with the general license, is unlikely to cause that individual to receive an annual dose in excess of ten percent [10%] of the limits specified in §289.202(f) of this title.

(4) Before the device may be transferred, each person licensed in accordance with this subsection to commercially distribute devices to generally licensed persons shall furnish:

(A) a copy of the general license in §289.251(f)(4)(H) of this title to each person to whom the licensee directly commercially distributes radioactive material in a device for use in accordance with the general license in §289.251(f)(4)(H) of this title;

(B) a copy of the general license in the NRC's or any agreement state's regulation equivalent to §289.251(f)(4)(H) of this title, or alternatively, a copy of the general license in §289.251(f)(4)(H) of this title to each person to whom the licensee directly commercially distributes radioactive material in a device for use in accordance with the general license of the NRC or any agreement state. If certain requirements of the regulations do not apply to the particular device, those requirements may be omitted. If a copy of the general license in §289.251(f)(4)(H) of this title is furnished to such a person, it shall be accompanied by an explanation that the use of the device is regulated by the NRC or any agreement state in accordance with requirements substantially the same as those in §289.251(f)(4)(H) of this title;

(C) a copy of §289.251(g) of this title;

(D) a list of the services that can only be performed by a specific licensee;

(E) information on acceptable disposal options including estimated costs of disposal;

(F) the name or position, address, and phone number of a contact person at the department [agency], the NRC, or any agreement state, from which additional information may be obtained; and

(G) an indication that it is the NRC's policy to issue high civil penalties for improper disposal if the device is commercially distributed to a general licensee of the NRC.

(5) An alternative approach to informing customers may be submitted by the licensee for approval by the department [agency].

(6) In the case of a transfer through an intermediate person, each licensee who commercially distributes radioactive material in a device for use in accordance with the general license in §289.251(f)(4)(H) of this title, shall furnish the information in paragraph (4) of this subsection to the intended user before [~~prior to~~] the initial transfer to the intermediate person.

(7) Each person licensed in accordance with this subsection to commercially distribute devices to generally licensed persons shall:

(A) report to the department [agency] all commercial distributions of devices to persons for use in accordance with the general license in §289.251(f)(4)(H) of this title and all receipts of devices from general licensees licensed in accordance with §289.251(f)(4)(H) of this title.

(i) The report shall:

(I) cover each calendar quarter;

(II) be filed within 30 days thereafter;

(III) be submitted on a form prescribed by the department [agency] or in a clear and legible report containing all of the data required by the form;

(IV) clearly indicate the period covered by the report;

(V) clearly identify the specific licensee submitting the report and include the license number of the specific licensee;

(VI) identify each general licensee by name and mailing address for the location of use; if there is no mailing address for the location of use, an alternate address for the general licensee shall be submitted along with information on the actual location of use;

(VII) identify an individual by name, title, and phone number who has knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements;

(VIII) identify the type, model and serial number of device, and serial number of sealed source commercially distributed;

(IX) identify the quantity and type of radioactive material contained in the device; and

(X) include the date of transfer.

(ii) If one or more intermediate persons will temporarily possess the device at the intended place of use before [~~prior to~~] its possession by the user, the report shall also include the information in accordance with paragraph (7)(A)(i) of this subsection for both the intended user and each intermediate person and clearly designate the intermediate person(s).

(iii) If no commercial distributions have been made to persons generally licensed in accordance with §289.251(f)(4)(H) of this title during the reporting period, the report shall so indicate.

(iv) For devices received from a general licensee, the report shall include the identity of the general licensee by name and address, the type, model number, and serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.

(B) report the following to the NRC to include covering each calendar quarter to be filed within 30 days thereafter, clearly

indicating the period covered by the report, the identity of the specific licensee submitting the report, and the license number of the specific licensee:

(i) all commercial distributions of such devices to persons for use in accordance with the NRC general license in Title 10, CFR, §31.5 and all receipts of devices from general licensees in areas under NRC jurisdiction including the following:

(I) identity of each general licensee by name and address;

(II) the type, model and serial number of device, and serial number of sealed source commercially distributed;

(III) the quantity and type of radioactive material contained in the device;

(IV) the date of transfer; or

(ii) if the licensee makes changes to a device possessed in accordance with the general license in §289.251(f)(4)(H) of this title, such that the label must be changed to update required information, the report shall identify the licensee, the device, and the changes to information on the device label;

(iii) in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor;

(iv) if no commercial distributions have been made to the NRC licensees during the reporting period; the report shall so indicate;

(C) report to the department [agency] or any agreement state all transfers of devices manufactured and commercially distributed in accordance with this subsection for use in accordance with a general license in that state's requirements equivalent to §289.251(f)(4)(H) of this title and all receipts of devices from general licensees.

(i) The report shall:

(I) be submitted within 30 days after the end of each calendar quarter in which such a device is commercially distributed to the generally licensed person;

(II) clearly indicate the period covered by the report;

(III) clearly identify the specific licensee submitting the report and include the license number of the specific licensee;

(IV) identify each general licensee by name and mailing address for the location of use; if there is no mailing address for the location of use an alternate address for the licensee shall be submitted along with the information on the actual location of use;

(V) identify an individual by name, position, and phone number who has knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements;

(VI) include the type, model and serial number of the device, and serial number of sealed source commercially distributed;

(VII) include the quantity and type of radioactive material contained in the device; and

(VIII) include the date of receipt.

(ii) If one or more intermediate persons will temporarily possess the device at the intended place of use before ~~prior~~

to] its possession by the user, the report shall also include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s).

(iii) If no commercial distributions have been made to persons in the agreement state during the reporting period, the report shall so indicate.

(iv) For devices received from a general licensee, the report shall include the identity of the general licensee by name and address, the type, model number, and serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor; and

(D) make, maintain, and retain records required by this paragraph for inspection by the department [agency] in accordance with subsection (mm) of this section, including the name, address, and the point of contact for each general licensee to whom the licensee directly or through an intermediate person commercially distributes radioactive material in devices for use in accordance with the general license provided in §289.251(f)(4)(H) of this title, or equivalent requirements of the NRC or any agreement state.

(i) The records shall include the following:

(I) the date of each commercial distribution;

(II) the isotope and the quantity of radioactivity in each device commercially distributed;

(III) the identity of any intermediate person; and

(IV) compliance with the reporting requirements of this subsection.

(ii) If no commercial distributions have been made to persons generally licensed in accordance with §289.251(f)(4)(H) of this title during the reporting period, the records shall so indicate.

(8) If a notification of bankruptcy has been made in accordance with subsection (x)(6) of this section or the license is to be terminated, each person licensed in accordance with this subsection shall provide, upon request to the NRC and to any appropriate agreement state, records of final disposition required in accordance with subsection (y)(16)(A) of this section.

(9) Each device that is transferred after February 19, 2002, shall meet the labeling requirements in accordance with paragraph (1)(C) - (E) of this subsection.

(m) Specific licenses for the manufacture, assembly, repair, or initial transfer of luminous safety devices containing tritium or promethium-147 for use in aircraft for distribution to persons generally licensed in accordance with §289.251(f)(4)(B) of this title. In addition to the requirements in subsection (e) of this section, a specific license to manufacture, assemble, repair, or initially transfer luminous safety devices containing tritium or promethium-147 for use in aircraft, for distribution to persons generally licensed in accordance with §289.251(f)(4)(B) of this title, will be issued if the department [agency] approves the information submitted by the applicant. The information shall satisfy the requirements of Title 10, CFR, §§32.53, 32.54, 32.55, and 32.56, or their equivalent.

(n) Specific licenses for the manufacture or initial transfer of calibration sources containing americium-241 or radium-226 for commercial distribution to persons generally licensed in accordance with §289.251(f)(4)(D) of this title.

(1) In addition to the requirements in subsection (e) of this section, a specific license to manufacture or initially transfer calibration

sources containing americium-241, or radium-226 to persons generally licensed in accordance with §289.251(f)(4)(D) of this title will be issued if the department [agency] approves the information submitted by the applicant. The information shall satisfy the requirements of Title 10, CFR, §§32.57, 32.58, 32.59, and §70.39 or their equivalent.

(2) Each person licensed in accordance with this subsection shall perform a dry wipe test on each source containing more than 0.1 μCi (3.7 kilobecquerels (kBq)) of americium-241 or radium-226 before transferring the source to a general licensee in accordance with §289.251(f)(4)(D) of this title or equivalent regulations of the NRC or any agreement state. This test shall be performed by wiping the entire radioactive surface of the source with a filter paper with the application of moderate finger pressure. The radioactivity on the filter paper shall be measured by using radiation detection instrumentation capable of detecting 0.005 μCi (0.185 kBq) of americium-241 or radium-226. If a source has been shown to be leaking or losing more than 0.005 μCi (0.185 kBq) of americium-241 or radium-226 by methods described in this paragraph, the source shall be rejected and shall not be transferred to a general licensee in accordance with §289.251(f)(4)(D) of this title or equivalent regulations of the NRC or any agreement state.

(o) Specific licenses for the manufacture and commercial distribution of sealed sources or devices containing radioactive material for medical use. In addition to the requirements in subsection (e) of this section, a specific license to manufacture and commercially distribute sealed sources and devices containing radioactive material to persons licensed in accordance with §289.256 of this title for use as a calibration, transmission, or reference source or for use of sealed sources listed in §289.256(q), (rr), (bbb), and (ddd) of this title will be issued if the department [agency] approves the following information submitted by the applicant:

(1) an evaluation of the radiation safety of each type of sealed source or device including the following:

(A) the radioactive material contained, its chemical and physical form, and amount;

(B) details of design and construction of the sealed source or device;

(C) procedures for, and results of, prototype tests to demonstrate that the sealed source or device will maintain its integrity under stresses likely to be encountered in normal use and accidents;

(D) for devices containing radioactive material, the radiation profile of a prototype device;

(E) details of quality control procedures to assure that production sources and devices meet the standards of the design and prototype tests;

(F) procedures and standards for calibrating sealed sources and devices;

(G) instructions for handling and storing the sealed source or device from the radiation safety standpoint. These instructions are to be included on a durable label attached to the sealed source or device or attached to a permanent storage container for the sealed source or device, provided that instructions that are too lengthy for the label may be summarized on the label and printed in detail on a brochure that is referenced on the label; and

(H) a legend and methods for labeling sources and devices as to their radioactive content;

(2) documentation that the label affixed to the sealed source or device, or to the permanent storage container for the sealed source or device, contains information on the radionuclide, quantity, and date

of assay, and a statement that the name of the sealed source or device is licensed by the department [agency] for commercial distribution to persons licensed for use of sealed sources in the healing arts or by equivalent licenses of the NRC or any agreement state;

(3) documentation that in the event the applicant desires that the sealed source or device be required to be tested for radioactive material leakage at intervals longer than 6 months, the applicant shall include in the application sufficient information to demonstrate that the longer interval is justified by performance characteristics of the sealed source or device or similar sources or devices and by design features that have a significant bearing on the probability or consequences of radioactive material leakage from the sealed source;

(4) documentation that in determining the acceptable interval for testing radioactive material leakage, information will be considered that includes[-; but is not limited to] the following:

(A) primary containment (sealed source capsule);

(B) protection of primary containment;

(C) method of sealing containment;

(D) containment construction materials;

(E) form of contained radioactive material;

(F) maximum temperature withstood during prototype tests;

(G) maximum pressure withstood during prototype tests;

(H) maximum quantity of contained radioactive material;

(I) radiotoxicity of contained radioactive material; and

(J) operating experience with identical sealed sources or devices or similarly designed and constructed sealed sources or devices; and

(5) the source or device has been registered in the Sealed Source and Device Registry.

(p) Specific licenses for the manufacture and commercial distribution of radioactive material for certain *in vitro* clinical or laboratory testing in accordance with the general license. In addition to the requirements in subsection (e) of this section, a specific license to manufacture or commercially distribute radioactive material for use in accordance with the general license in §289.251(f)(4)(G) of this title will be issued if the department [agency] approves the following information submitted by the applicant:

(1) documentation that the radioactive material will be prepared for distribution in prepackaged units of:

(A) iodine-125 in units not exceeding 10 μCi (0.37 megabecquerel (MBq)) each;

(B) iodine-131 in units not exceeding 10 μCi (0.37 MBq) each;

(C) carbon-14 in units not exceeding 10 μCi (0.37 MBq) each;

(D) hydrogen-3 (tritium) in units not exceeding 50 μCi (1.85 MBq) each;

(E) iron-59 in units not exceeding 20 μCi (0.74 MBq) each;

(F) cobalt-57 in units not exceeding 10 μCi (0.37 MBq) each;

(G) selenium-75 in units not exceeding 10 μCi (0.37 MBq) each; or

(H) mock iodine-125 in units not exceeding 0.05 μCi (1.85 kBq) of iodine-129 and 0.005 μCi (0.185 kBq) of americium-241 each;

(2) evidence that each prepackaged unit will bear a durable, clearly visible label:

(A) identifying the radioactive contents as to chemical form and radionuclide, and indicating that the amount of radioactivity does not exceed 10 μCi (0.37 MBq) of iodine-125, iodine-131, carbon-14, cobalt-57, or selenium-75; 50 μCi (1.85 MBq) of hydrogen-3 (tritium); 20 μCi (0.74 MBq) of iron-59; or mock iodine-125 in units not exceeding 0.05 μCi (1.85 kBq) of iodine-129 and 0.005 μCi (0.185 kBq) of americium-241; and

(B) displaying the radiation caution symbol in accordance with §289.202(z) of this title and the words, "CAUTION, RADIOACTIVE MATERIAL," and "Not for Internal or External Use in Humans or Animals";

(3) that one of the following statements, as appropriate, or a substantially similar statement appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure that accompanies the package:

(A) option 1:

Figure: 25 TAC §289.252(p)(3)(A) (No change.)

(B) option 2:

Figure: 25 TAC §289.252(p)(3)(B) (No change.)

(4) that the label affixed to the unit, or the leaflet or brochure that accompanies the package, contains adequate information as to the precautions to be observed in handling and storing the radioactive material. In the case of a mock iodine-125 reference or calibration source, the information accompanying the source shall also contain directions to the licensee regarding the waste disposal requirements of §289.202(ff) of this title.

(q) Specific licenses for the manufacture and commercial distribution of ice detection devices. In addition to the requirements of subsection (e) of this section, a specific license to manufacture and commercially distribute ice detection devices to persons generally licensed in accordance with §289.251(f)(4)(E) of this title will be issued if the department [~~agency~~] approves the information submitted by the applicant. This information shall satisfy the requirements of Title 10, CFR, §§32.61 and 32.62.

(r) Specific licenses for the manufacture, preparation, or transfer for commercial distribution of radioactive drugs containing radioactive materials for medical use under §289.256 of this title.

(1) In addition to the requirements in subsection (e) of this section, a specific license to manufacture, prepare, or transfer for commercial distribution, radioactive drugs containing radioactive material for use by persons authorized in accordance with §289.256 of this title will be issued if the department [~~agency~~] approves the following information submitted by the applicant:

(A) evidence that the applicant is at least one of the following:

(i) registered with the United States Food and Drug Administration (FDA) as the owner or operator of a drug establishment that engages in the manufacture, preparation, propagation, compounding, or processing of a drug in accordance with Title 21, CFR, §207.17 [~~Title 21, CFR, §207.20(a)~~];

(ii) registered or licensed with a state agency as a drug manufacturer;

(iii) licensed as a pharmacy by the Texas State Board of Pharmacy;

(iv) operating as a nuclear pharmacy within a federal medical institution; or

(v) a positron emission tomography (PET) drug production facility registered with a state agency;

(B) radionuclide data relating to the following:

(i) chemical and physical form;

(ii) maximum activity per vial, syringe, generator, or other container of the radioactive drug; and

(iii) shielding provided by the packaging to show it is appropriate for the safe handling and storage of the radioactive drugs by medical use licensees;

(C) labeling requirements including the following:

(i) that each transport radiation shield, whether it is constructed of lead, glass, plastic, or other material, of a radioactive drug to be transferred for commercial distribution shall include the following:

(I) the radiation symbol and the words "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL;"

(II) the name of the radioactive drug or its abbreviation; and

(III) the quantity of radioactivity at a specified date and time (the time may be omitted for radioactive drugs with a half-life [~~half life~~] greater than 100 days); and

(ii) that each syringe, vial, or other container used to hold a radioactive drug to be transferred for commercial distribution shall include the following:

(I) radiation symbol and the words, "CAUTION, RADIOACTIVE MATERIAL" or "DANGER, RADIOACTIVE MATERIAL;" and

(II) an identifier that ensures that the syringe, vial, or other container can be correlated with the information on the transport radiation shield.

(2) A licensee shall possess and use instrumentation to measure the radioactivity of radioactive drugs and shall have procedures for the use of the instrumentation. The licensee shall measure, by direct measurement or by a combination of measurements and calculations, the amount of radioactivity in dosages of alpha, beta, or photon-emitting radioactive drugs before [~~prior to~~] transfer for commercial distribution. In addition, the licensee shall:

(A) perform tests before initial use, periodically, and following repair, on each instrument for accuracy, linearity, and geometry dependence, as appropriate for the use of the instrument; and make adjustments when necessary;

(B) check each instrument for constancy and proper operation at the beginning of each day of use; and

(C) make, maintain, and retain records of the tests and checks required in this paragraph for inspection by the department [~~agency~~] in accordance with subsection (mm) of this section.

(3) A licensee described in paragraph (1)(A)(iii) or (iv) of this subsection shall prepare radioactive drugs for medical use as defined in §289.256 of this title with the following provisions.

(A) Radioactive drugs shall be prepared by either an authorized nuclear pharmacist, as specified in subparagraphs (B) and (D) of this paragraph, or an individual under the supervision of an authorized nuclear pharmacist as specified in §289.256(s) of this title.

(B) A pharmacist shall be allowed to work as an authorized nuclear pharmacist if:

(i) the individual qualifies as an authorized nuclear pharmacist as defined in §289.256 of this title;

(ii) the individual meets the requirements specified in §289.256(k)(2) and (m) of this title, and the licensee has received from the department [agency], an approved license amendment identifying this individual as an authorized nuclear pharmacist; or

(iii) the individual is designated as an authorized nuclear pharmacist in accordance with subparagraph (D) of this paragraph.

(C) The actions authorized in subparagraphs (A) and (B) of this paragraph are permitted in spite of more restrictive language in license conditions.

(D) A licensee may designate a pharmacist, as defined in §289.256 of this title, as an authorized nuclear pharmacist if:

(i) the individual was a nuclear pharmacist preparing only radioactive drugs containing accelerator-produced radioactive material; and

(ii) the individual practiced at a pharmacy at a government agency or federally recognized Indian Tribe or at all other pharmacies before [~~prior to~~] the effective date of this rule as noticed by the NRC or the department [agency].

(E) The licensee shall provide the following to the department [agency]:

(i) a copy of each individual's certification by a specialty board whose certification process has been recognized by the NRC, the department [agency], or an agreement state as specified in §289.256(k)(1) of this title [~~with the written attestation signed by a preceptor as required by §289.256(k)(2)(C) of this title~~]; or

(ii) the department [agency], NRC, or another agreement state license; or

(iii) the permit issued by a broad scope licensee or the authorization from a commercial nuclear pharmacy authorized to list its own authorized nuclear pharmacist; or

(iv) documentation that only accelerator-produced radioactive materials were used in the practice of nuclear pharmacy at a government agency or federally recognized Indian Tribe or at all other locations of use before [~~prior to~~] the effective date of this rule as noticed by the NRC or the department [agency]; and

(v) a copy of the Texas State Board of Pharmacy licensure or registration, no later than 30 days after the date that the licensee allows, in accordance with subparagraph (B)(i) and (iii) of this paragraph, the individual to work as an authorized nuclear pharmacist.

(F) The radiopharmaceuticals for human use shall be processed and prepared according to instructions that are furnished by the manufacturer on the label attached to or in the FDA-accepted instructions in the leaflet or brochure that accompanies the generator or reagent kit.

(G) If the authorized nuclear pharmacist elutes generators or processes radioactive material with the reagent kit in a manner that deviates from instructions furnished by the manufacturer on the label attached to or in the leaflet or brochure that accompanies the generator or reagent kit or in the accompanying leaflet or brochure, a complete description of the deviation shall be made and maintained for inspection by the department [agency] in accordance with subsection (mm) of this section.

(4) A licensee shall satisfy the labeling requirements in subsection (r)(1)(C) of this section.

(5) [(4)] Nothing in this subsection relieves the licensee from complying with applicable FDA, or other federal and state requirements governing radioactive drugs.

(s) Specific licenses for the manufacture and commercial distribution of products containing depleted uranium for mass-volume applications.

(1) In addition to the requirements in subsection (e) of this section, a specific license to manufacture products and devices containing depleted uranium for use in accordance with §289.251(f)(3)(D) of this title or equivalent regulations of the NRC or an agreement state, will be issued if the department [agency] approves the following information submitted by the applicant:

(A) the design, manufacture, prototype testing, quality control procedures, labeling or marking, proposed uses, and potential hazards of the product or device to provide reasonable assurance that possession, use, or commercial distribution of the depleted uranium in the product or device is not likely to cause any individual to receive in any period of one year a radiation dose in excess of ten percent [~~10%~~] of the limits specified in §289.202(f) of this title; and

(B) reasonable assurance is provided that unique benefits will accrue to the public because of the usefulness of the product or device.

(2) In the case of a product or device whose unique benefits are questionable, the department [agency] will issue a specific license in accordance with paragraph (1) of this subsection only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.

(3) The department [agency] may deny any application for a specific license in accordance with this subsection if the end use(s) of the product or device cannot be reasonably foreseen.

(4) Each person licensed in accordance with paragraph (1) of this subsection shall:

(A) maintain the level of quality control required by the license in the manufacture of the product or device, and in the installation of the depleted uranium into the product or device;

(B) label or mark each unit to:

(i) identify the manufacturer of the product or device and the number of the license under which the product or device was manufactured, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and

(ii) state that the receipt, possession, use, and commercial distribution of the product or device are subject to a general license or the equivalent and the requirements of the NRC or of an agreement state;

(C) assure that before being installed in each product or device, the depleted uranium has been impressed with the following legend clearly legible through any plating or other covering: "Depleted Uranium";

(D) furnish a copy of the following:

(i) the general license in §289.251(f)(3)(D) of this title to each person to whom the licensee commercially distributes depleted uranium in a product or device for use in accordance with the general license in §289.251(f)(3)(D) of this title;

(ii) the NRC's or agreement state's requirements equivalent to the general license in §289.251(f)(3)(D) of this title and a copy of the NRC's or agreement state's certificate; or

(iii) alternately, a copy of the general license in §289.251(f)(3)(D) of this title to each person to whom the licensee commercially distributes depleted uranium in a product or device for use in accordance with the general license of the NRC or an agreement state;

(E) report to the department [agency] all commercial distributions of products or devices to persons for use in accordance with the general license in §289.251(f)(3)(D) of this title.

(i) The report shall be submitted within 30 days after the end of each calendar quarter in which such a product or device is commercially distributed to the generally licensed person and shall include the following:

(I) identity of each general licensee by name and address;

(II) identity of an individual by name and [and/or] position who may constitute a point of contact between the department [agency] and the general licensee;

(III) the type and model number of devices commercially distributed; and

(IV) the quantity of depleted uranium contained in the product or device.

(ii) If no commercial distributions have been made to persons generally licensed in accordance with §289.251(f)(3)(D) of this title during the reporting period, the report shall so indicate;

(F) report to the NRC and each responsible agreement state agency all commercial distributions of industrial products or devices to persons for use in accordance with the general license in the NRC's or agreement state's equivalent requirements to §289.251(f)(3)(D) of this title. The report shall meet the provisions of subparagraph (E)(i) and (ii) of this paragraph; and

(G) make, maintain, and retain records including the name, address, and point of contact for each general licensee to whom the licensee commercially distributes depleted uranium in products or devices for use in accordance with the general license provided in §289.251(f)(3)(D) of this title or equivalent requirements of the NRC or any agreement state. The records shall be maintained for inspection by the department [agency] in accordance with subsection (mm) of this section and shall include the date of each commercial distribution, the quantity of depleted uranium in each product or device commercially distributed, and compliance with the report requirements of this section.

(t) Specific licenses for the processing of loose radioactive material for manufacture and commercial distribution. In addition to the requirements in subsection (e) of this section, a license to process loose radioactive material for manufacture and commercial distribution of

radioactive material to persons authorized to possess such radioactive material in accordance with this chapter will be issued if the department [agency] approves the following information submitted by the applicant:

(1) radionuclides to be used, including the chemical and [and/or] physical form and the maximum activity of each radionuclide;

(2) intended use of each radionuclide and the sealed sources or [and/or] other products to be manufactured that includes:

(A) receipt of radioactive material;

(B) chemical or physical preparations;

(C) sealed source construction;

(D) final assembly or processing;

(E) quality assurance testing;

(F) quality control program;

(G) leak testing;

(H) American National Standards Institute (ANSI) testing procedures;

(I) transportation containers;

(J) shipping procedures; and

(K) disposition of unwanted or unused radioactive material;

(3) scaled drawings of the facility to include[; but not be limited to]:

(A) air filtration;

(B) ventilation system;

(C) plumbing; and

(D) radioactive material handling systems and, when applicable, remote handling hot cells;

(4) details of the environmental monitoring program; and

(5) documentation of training as specified in subsection (jj)(1) of this section for all personnel who will be handling radioactive materials.

(u) Specific licenses for other manufacture and commercial distribution of radioactive material. In addition to the requirements in subsection (e) of this section, a license to manufacture and commercially distribute radioactive material to persons authorized to possess such radioactive material in accordance with these requirements will be issued if the department [agency] approves the following information submitted by the applicant:

(1) the radionuclides to be used, including the chemical and [and/or] physical form and the maximum activity of each radionuclide;

(2) the intended use of each radionuclide and the sealed sources or [and/or] other products to be manufactured that includes:

(A) receipt of radioactive material;

(B) chemical or physical preparations;

(C) sealed source construction;

(D) final assembly or processing;

(E) quality assurance testing;

(F) quality control program;

- (G) leak testing;
- (H) ANSI testing procedures;
- (I) transportation containers;
- (J) shipping procedures; and
- (K) disposition of unwanted or unused radioactive material;

(3) scaled drawings of radioactive material handling systems; and

(4) documentation of training as specified in subsection (jj)(1) of this section for all personnel who will be handling radioactive material.

(v) Sealed source or device evaluation.

(1) Any manufacturer or initial distributor of a sealed source or device containing a sealed source may submit a request to the department [agency] for evaluation of radiation safety information about its product and for its registration.

(2) The request for review shall be sent to the department [agency] in accordance with §289.201(k) of this title and shall be submitted in duplicate accompanied by the appropriate fee specified in §289.204 of this title.

(3) In order to provide reasonable assurance that the radiation safety properties of the source or device are adequate to protect health and minimize danger to life and property, the request for evaluation of a sealed source or device shall include sufficient information about the:

- (A) design;
- (B) manufacture;
- (C) prototype testing;
- (D) quality control program;
- (E) labeling;
- (F) proposed uses; and
- (G) leak testing.

(4) The request for evaluation of a device shall also include sufficient information about:

- (A) installation;
- (B) service and maintenance;
- (C) operating and safety instructions; and
- (D) its potential hazards.

(5) The department [agency] normally evaluates a sealed source or a device using radiation safety criteria in accepted industry standards. If these standards and criteria do not readily apply to a particular case, the department [agency] formulates reasonable standards and criteria with the help of the manufacturer or distributor. The department [agency] shall use criteria and standards sufficient to ensure that the radiation safety properties of the device or sealed source are adequate to protect health and minimize danger to life and property. Section 289.251(e)(1) - (3) of this title includes specific criteria that apply to certain exempt products and §289.251(f) of this title includes specific criteria applicable to certain generally licensed devices. This section includes specific provisions that apply to certain specifically licensed items.

(6) After completion of the evaluation, the department [agency] issues a sealed source and device (SS & D) certificate of registration to the person making the request. The SS & D certificate of registration acknowledges the availability of the submitted information for inclusion in an application for a specific license proposing use of the product, or concerning use under an exemption from licensing or general license as applicable for the category of SS & D certificate of registration.

(7) The person submitting the request for evaluation and SS & D certificate of registration of safety information about the product shall manufacture and distribute the product in accordance with:

(A) the statements and representations, including quality control program, contained in the request; and

(B) the provisions of the SS & D certificate of registration.

(8) Authority to manufacture or initially distribute a sealed source or device to specific licensees shall be provided in the license without the issuance of a SS & D certificate of registration in the following cases:

(A) calibration and reference sources shall contain no more than:

(i) 1 mCi (37 MBq) for beta and/or gamma emitting radionuclides; or

(ii) 10 µCi (0.37 MBq) for alpha emitting radionuclides; or

(B) the intended recipients are qualified by training and experience and have sufficient facilities and equipment to safely use and handle the requested quantity of radioactive material in any form in the case of unregistered sources or, for registered sealed sources contained in unregistered devices, are qualified by training and experience and have sufficient facilities and equipment to safely use and handle the requested quantity of radioactive material in unshielded form, as specified in their licenses; and

(i) the intended recipients are licensed in accordance with subsection (h) of this section, §289.256(o) of this title, or equivalent regulations of the NRC or any agreement state; or

(ii) the recipients are authorized for research and development; or

(iii) the sources and devices are to be built to the unique specifications of the particular recipient and contain no more than 20 Ci (740 GBq) of tritium or 200 mCi (7.4 GBq) of any other radionuclide.

(9) After the SS & D certificate of registration is issued, the department [agency] may conduct an additional review as it determines is necessary to ensure compliance with current regulatory standards. In conducting its review, the department [agency] will complete its evaluation in accordance with criteria specified in this section. The department [agency] may request such additional information as it considers necessary to conduct its review and the SS & D certificate of registration holder shall provide the information as requested.

(10) Inactivation of SS & D certificate(s) of registration.

(A) An SS & D certificate of registration holder who no longer manufactures or initially transfers any of the sealed source(s) or device(s) covered by a particular SS & D certificate of registration issued by the department [agency] shall request inactivation of the SS & D certificate of registration. Such a request shall be made to the department [agency] by an appropriate method in accordance with

§289.201(k) of this title and shall normally be made no later than 2 years after initial distribution of all of the source(s) or device(s) covered by the SS & D certificate of registration has ceased. However, if the SS & D certificate of registration holder determines that an initial transfer was in fact the last initial transfer more than 2 years after that transfer, the SS & D certificate of registration holder shall request inactivation of the SS & D certificate of registration within 90 days of this determination and briefly describe the circumstances of the delay.

(B) If a distribution license is to be terminated in accordance with subsection (y) of this section, the licensee shall request inactivation of its SS & D certificate of registration(s) associated with that distribution license before the department [agency] will terminate the license. Such a request for inactivation of the SS & D certificate(s) of registration shall indicate that the license is being terminated and include the associated specific license number.

(C) A specific license to manufacture or initially transfer a source or device covered only by an inactivated SS & D certificate of registration no longer authorizes the licensee to initially transfer such sources or devices for use. Servicing of devices shall be in accordance with any conditions in the SS & D certificate of registration, including in the case of an inactive SS & D certificate of registration.

(w) Issuance of specific licenses.

(1) When the department [agency] determines that an application meets the requirements of the Act and the rules of the department [agency], the department [agency] will issue a specific license authorizing the proposed activity in such form and containing the conditions and limitations as the department [agency] deems appropriate or necessary.

(2) The department [agency] may incorporate in any license at the time of issuance, or thereafter by amendment, additional requirements and conditions with respect to the licensee's receipt, possession, use, and transfer of radioactive material subject to this section as the department [agency] deems appropriate or necessary in order to:

(A) minimize danger to occupational and public health and safety and the environment;

(B) require reports and the keeping of records, and to provide for inspections of activities in accordance with the license as may be appropriate or necessary; and

(C) prevent loss or theft of radioactive material subject to this chapter.

(3) The department [agency] may request, and the licensee shall provide, additional information after the license has been issued to enable the department [agency] to determine whether the license should be modified in accordance with subsection (dd) of this section.

(x) Specific terms and conditions of licenses.

(1) Each license issued in accordance with this section shall be subject to the applicable provisions of the Act and to applicable rules, now or hereafter in effect, and orders of the department [agency].

(2) No license issued or granted in accordance with this section and no right to possess or utilize radioactive material granted by any license issued in accordance with this section shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the department [agency] shall, after securing full information, find that the transfer is in accordance with the provisions of the Act and to applicable rules, now or hereafter in effect, and orders of the department [agency], and shall give its consent in writing.

(3) An application for transfer of license shall include:

(A) the identity, technical and financial qualifications of the proposed transferee; and

(B) financial assurance for decommissioning information required by subsection (gg) of this section.

(4) Each person licensed by the department [agency] in accordance with this section shall confine use and possession of the radioactive material licensed to the locations and purposes authorized in the license. Radioactive material shall not be used or stored in residential locations unless specifically authorized by the department [agency].

(5) The licensee shall notify the department [agency], in writing within 15 calendar days, of any of the following changes:

(A) name;

(B) mailing address; or

(C) RSO.

(6) Each licensee shall notify the department [agency], in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy by the licensee or its parent company, if the parent company is involved in the bankruptcy.

(7) The notification in paragraph (6) of this subsection shall include:

(A) the bankruptcy court in which the petition for bankruptcy was filed; and

(B) the date of the filing of the petition.

(8) A copy of the petition for bankruptcy shall be submitted to the department [agency] along with the written notification.

(9) In making a determination whether to grant, deny, amend, renew, revoke, suspend, or restrict a license, the department [agency] may consider the technical competence and compliance history of an applicant or holder of a license. After an opportunity for a hearing, the department may [agency shall] deny an application for a license, an amendment to a license, or renewal of a license if the applicant's compliance history reveals that three or more department [agency] actions have been issued against the applicant, within the previous six years, that assess administrative or civil penalties against the applicant, or that revoke or suspend the license.

(10) Each licensee preparing technetium-99m radiopharmaceuticals from molybdenum-99/technetium-99m generators or rubidium-82 from strontium-82/rubidium-82 generators shall test the generator eluates for molybdenum-99 breakthrough or strontium-82 and strontium-85 contamination, respectively, in accordance with §289.256 of this title.

(A) The licensee shall make, maintain, and retain a record of the results of each test for inspection by the department [agency] in accordance with subsection (mm) of this section.

(B) The licensee shall report the results of any test that exceeds the permissible concentration listed in §289.256(ii) of this title at the time of generator elution, in accordance with §289.256(xxx) of this title.

(11) Licensees shall not hold radioactive waste, sources, or devices not authorized for disposal by decay in storage, and that are not in use for longer than 24 months following the last principal activity use. Sources and devices kept in standby for future use may be excluded from the 24-month time limit if the department [agency] approves a plan for future use. A plan for an alternative disposal timeframe may be submitted by the licensee if the 24-month time limit can-

not be met. Licensees shall submit plans to the department [agency] at least 30 days before [~~prior to~~] the end of the 24 months of nonuse.

(y) Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

(1) Except as provided in paragraph (2) of this subsection and subsection (z)(2) of this section, each specific license expires at the end of the day, in the month and year stated in the license.

(2) Expiration of the specific license does not relieve the licensee of the requirements of this chapter.

(3) All license provisions continue in effect beyond the expiration date, with respect to possession of radioactive material until the department [agency] notifies the former licensee in writing that the provisions of the license are no longer binding. During this time, the former licensee shall:

(A) be limited to actions involving radioactive material that are related to decommissioning; and

(B) continue to control entry to restricted areas until the location(s) is suitable for release for unrestricted use in accordance with the requirements in §289.202(ddd) of this title.

(4) Within 60 days of the occurrence of any of the following, each licensee shall provide notification to the department [agency] in writing and either begin decommissioning a site, or any separate building or outdoor area that contains residual radioactivity, so that the building and [~~and/or~~] outdoor area is suitable for release in accordance with §289.202(eee) of this title, or submit within 12 months of notification a decommissioning plan, if required by paragraph (7) of this subsection, and begin decommissioning upon approval of that plan if:

(A) the license has expired or has been revoked in accordance with this subsection or subsection (dd) of this section;

(B) the licensee has decided to permanently cease principal activities, as defined in §289.201(b) of this title, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department [agency] requirements;

(C) no principal activities at an entire site as specified in the license have been conducted for a period of 24 months; or

(D) no principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with §289.202(eee) of this title.

(5) Coincident with the notification required by paragraph (4) of this subsection, the licensee shall maintain in effect all decommissioning financial assurances established by the licensee in accordance with subsection (gg) of this section in conjunction with a license issuance or renewal or as required by this section. The amount of the financial assurance shall be increased, or may be decreased, as appropriate, with department [agency] approval, to cover the detailed cost estimate for decommissioning established in accordance with paragraph (10)(E) of this subsection.

(A) Any licensee who has not provided financial assurance to cover the detailed cost estimate submitted with the decommissioning plan shall do so in accordance with subsection (gg) of this section.

(B) Following approval of the decommissioning plan, a licensee may reduce the amount of the financial assurance as decommissioning proceeds and radiological contamination is reduced at the site, with the approval of the department [agency].

(6) The department [agency] may grant a request to delay or postpone initiation of the decommissioning process if the department [agency] determines that such relief is not detrimental to the occupational and public health and safety and is otherwise in the public interest. The request shall be submitted no later than 30 days before notification in accordance with paragraph (4) of this subsection. The schedule for decommissioning set forth in paragraph (4) of this subsection may not commence until the department [agency] has made a determination on the request.

(7) A decommissioning plan shall be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the department [agency] and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(A) procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(B) workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(C) procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(D) procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(8) The department [agency] may approve an alternate schedule for submittal of a decommissioning plan required in accordance with paragraph (4) of this subsection if the department [agency] determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the occupational and public health and safety and is otherwise in the public interest.

(9) The procedures listed in paragraph (7) of this subsection may not be carried out before [~~prior to~~] approval of the decommissioning plan.

(10) The proposed decommissioning plan for the site or separate building or outdoor area shall include the following:

(A) a description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(B) a description of planned decommissioning activities;

(C) a description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(D) a description of the planned final radiation survey;

(E) an updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning; and

(F) for decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, a justification for the delay based on the criteria in paragraph (15) of this subsection.

(11) The proposed decommissioning plan will be approved by the department [agency] if the information in the plan demonstrates

that the decommissioning will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

(12) Except as provided in paragraph (14) of this subsection, licensees shall complete decommissioning of the site or separate building or outdoor areas as soon as practicable but no later than 24 months following the initiation of decommissioning.

(13) Except as provided in paragraph (14) of this subsection, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(14) The department [agency] may approve a request for an alternate schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the department [agency] determines that the alternative is warranted by consideration of the following:

(A) whether it is technically feasible to complete decommissioning within the allotted 24-month [24 month] period;

(B) whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month [24 month] period;

(C) whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(D) whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(E) other site-specific factors that the department [agency] may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, groundwater treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(15) As the final step in decommissioning, the licensee shall do the following:

(A) certify the disposition of all licensed material, including accumulated wastes; and

(B) conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in accordance with the radiological requirements for license termination specified in §289.202(ddd) of this title. The licensee shall do the following, as appropriate:

(i) report the following levels:

(I) gamma radiation in units of microroentgen per hour ($\mu\text{R/hr}$) (millisieverts per hour (mSv/hr)) at 1 meter (m) from surfaces;

(II) radioactivity, including alpha and beta, in units of disintegrations per minute (dpm) or microcuries (μCi) (megabecquerels (MBq)) per 100 square centimeters (cm^2) for surfaces;

(III) μCi (MBq) per milliliter for water; and

(IV) picocuries (pCi) (becquerels (Bq)) per gram (g) for solids such as soils or concrete; and

(ii) specify the manufacturer's name and model and serial number of survey instrument(s) used and certify that each instru-

ment is properly calibrated in accordance with §289.202(p) of this title and tested.

(16) The department [agency] will provide written notification to specific licensees, including former licensees with provisions continued in effect beyond the expiration date in accordance with paragraph (3) of this subsection, that the provisions of the license are no longer binding. The department [agency] will provide such notification when the department [agency] determines that:

(A) radioactive material has been properly disposed;

(B) reasonable effort has been made to eliminate residual radioactive contamination, if present;

(C) a radiation survey has been performed that demonstrates that the premises are suitable for release in accordance with the radiological requirements for license termination specified in §289.202(ddd) of this title, or other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with the radiological requirements for license termination specified in §289.202(ddd) of this title; and

(D) any outstanding fees in accordance with §289.204 of this title are paid and any outstanding notices of violations of this chapter or of license conditions are resolved.

(17) Each licensee shall submit to the department [agency] all records required by §289.202(nn)(3) of this title before the license is terminated.

(z) Renewal of licenses.

(1) Requests for renewal of specific licenses shall be filed in accordance with subsection (d)(1) - (4) and (6) - (8) [~~(d)(1) - (3) and (5) - (7)~~] of this section. In any application for renewal, the applicant may incorporate drawings by clear and specific reference (for example, title, date and unique number of drawing), if no modifications have been made since previously submitted.

(2) In any case in which a licensee, not less than 30 days before ~~prior to~~ expiration of an existing license, has filed a request in proper form for renewal or for a new license authorizing the same activities, such existing license shall not expire until the request has been finally determined by the department [agency]. In any case in which a licensee, not more than 90 days after the expiration of an existing license, has filed a request in proper form for renewal or for a new license authorizing the same activities, the department [agency] may reinstate the license and extend the expiration until the request has been finally determined by the department [agency]. The requirements in this subsection are subject to the provisions of Texas Government Code, §2001.054.

(3) An application for technical renewal of a license will be approved if the department [agency] determines that the requirements of subsection (e) of this section have been satisfied.

(aa) Amendment of licenses at request of licensee.

(1) Requests for amendment of a license shall be filed in accordance with subsection (d)(1) - (4) [~~(d)(1) - (3)~~] of this section shall be signed by management or the RSO, and shall specify the respects in which the licensee desires a license to be amended and the grounds for the amendment.

(2) Requests for amendments to delete a subsite from a license shall be filed in accordance with subsections (d)(1) and (2) and (y)(13) and (15) of this section.

(bb) Department [Agency] action on requests to renew or amend. In considering a request by a licensee to renew or amend a

license, the department [agency] will apply the criteria in subsection (e) of this section as applicable.

(cc) Transfer of material.

(1) No licensee shall transfer radioactive material except as authorized in accordance with this chapter. This subsection does not include transfer for commercial distribution.

(2) Except as otherwise provided in a license and subject to the provisions of paragraphs (3) and (4) of this subsection, any licensee may transfer radioactive material:

(A) to the department [agency] (A licensee may transfer material to the department [agency] only after receiving prior approval from the department [agency]);

(B) to the United States Department of Energy (DOE);

(C) to any person exempt from this section to the extent permitted in accordance with such exemption;

(D) to any person authorized to receive such material in accordance with the terms of a general license or its equivalent, or a specific license or equivalent licensing document, issued by the department [agency], the NRC, or any agreement state, or to any person otherwise authorized to receive such material by the federal government or any agency of the federal government, the department [agency], or any agreement state; or

(E) as otherwise authorized by the department [agency] in writing.

(3) Before transferring radioactive material to a specific licensee of the department [agency], the NRC, or any agreement state, or to a general licensee who is required to register with the department [agency], the NRC, or any agreement state before [prior to] receipt of the radioactive material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred.

(4) The following methods for the verification required by paragraph (3) of this subsection are acceptable.

(A) The transferor may possess and have read a current copy of the transferee's specific license.

(B) When a current copy of the transferee's specific license described in subparagraph (A) of this paragraph is not readily available or when a transferor desires to verify that information received is correct or up-to-date, the transferor may obtain and record confirmation from the department [agency], the NRC, or any agreement state that the transferee is licensed to receive the radioactive material.

(5) Preparation for shipment and transport of radioactive material shall be in accordance with the provisions of subsection (ff) of this section.

(6) Requirements for transfer of small quantities of source material.

(A) An application for a specific license to initially transfer source material for use in accordance with §289.251(f)(3) of this title; Title 10, CFR, §40.22; or equivalent regulations of any agreement state, will be approved if:

(i) the applicant satisfies the general requirements specified in subsection (e) of this section; and

(ii) the applicant submits adequate information on, and the department [agency] approves the methods to be used for quality control, labeling, and providing safety instructions to recipients.

(B) Quality control, labeling, safety instructions, and records and reports. Each person licensed under subparagraph (A) of this paragraph shall:

(i) label the immediate container of each quantity of source material with the type of source material and quantity of material and the words, "radioactive material."

(ii) ensure that the quantities and concentrations of source material are as labeled and indicated in any transfer records.

(iii) provide the information specified in this clause to each person to whom source material is transferred for use under §289.251(f)(3) of this title; Title 10, CFR, §40.22; or equivalent regulations of any agreement state. This information must be transferred before the source material is transferred for the first time in each calendar year to the particular recipient. The required information includes:

(I) a copy, as applicable, of §289.251(f)(3) of this title; Title 10, CFR, §40.22; or the equivalent agreement state regulation that applies; and of this subsection; Title 10, CFR, §40.51; or the equivalent agreement state regulations that apply; and

(II) appropriate radiation safety precautions and instructions relating to handling, use, storage, and disposal of the material.

(iv) report transfers as follows:

(I) File a report with the department [agency] and the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555. The report shall include the following information:

(-a-) the name, address, and license number of the person who transferred the source material;

(-b-) for each general licensee under §289.251(f)(3) of this title; Title 10, CFR, §40.22; or equivalent regulations of any agreement state to whom greater than 50 grams (0.11 lb) of source material has been transferred in a single calendar quarter, the name and address of the general licensee to whom source material is distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and

(-c-) the total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients.

(II) File a report with each responsible agreement state agency that identifies all persons, operating under §289.251(f)(3) of this title; Title 10, CFR, §40.22, or equivalent regulations of any agreement state to whom greater than 50 grams (0.11 lb) of source material has been transferred within a single calendar quarter. The report shall include the following information specific to those transfers made to the agreement state being reported to:

(-a-) the name, address, and license number of the person who transferred the source material; and

(-b-) the name and address of the general licensee to whom source material was distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and

(-c-) the total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients within the agreement state.

(III) The following are to be submitted to the department [agency] by January 31 of each year:

(-a-) each report required by subclauses (I) and (II) of this clause covering all transfers for the previous calendar year;

(-b-) if no transfers were made during the current period to persons generally licensed in accordance with §289.251(f)(3) of this title; Title 10, CFR, §40.22; or equivalent regulations of any agreement state, a report to the department [agency] indicating so; and

(-c-) if no transfers have been made to general licensees in a particular agreement state during the reporting period, this information shall be reported to the responsible agreement state upon request of that agency.

(C) Records.

(i) The licensee shall maintain all information that supports the reports required by this paragraph concerning each transfer to a general licensee for inspection by the department [agency] in accordance with subsection (mm) of this section.

(ii) The licensee who transferred the material shall retain each record of transfer of radioactive material until the department [agency] terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(dd) Modification, suspension, and revocation of licenses.

(1) The terms and conditions of all licenses shall be subject to revision or modification. A license may be modified, suspended or revoked by reason of amendments to the Act, by reason of rules in this chapter, or orders issued by the department [agency].

(2) Any license may be revoked, suspended, or modified, in whole or in part, for any of the following:

(A) any material false statement in the application or any statement of fact required under provisions of the Act;

(B) conditions revealed by such application or statement of fact or any report, record, or inspection, or other means that would warrant the department [agency] to refuse to grant a license on an original application;

(C) violation of, or failure to observe any of the terms and conditions of the Act, this chapter, the license, or order of the department [agency]; or

(D) existing conditions that constitute a substantial threat to the public health or safety or the environment.

(3) Each specific license revoked by the department [agency] ends at the end of the day on the date of the department's [agency's] final determination to revoke the license, or on the revocation date stated in the determination, or as otherwise provided by the department [agency] order.

(4) Except in cases in which the occupational and public health or safety requires otherwise, no license shall be suspended or revoked unless, before [~~prior to~~] the institution of proceedings therefore, facts or conduct that may warrant such action shall have been called to the attention of the licensee in writing and the licensee shall have been afforded an opportunity to demonstrate compliance with all lawful requirements.

(ee) Reciprocal recognition of licenses.

(1) Subject to this section, any person who holds a specific license from the NRC or any agreement state, and issued by the agency having jurisdiction where the licensee maintains an office for directing the licensed activity and at which radiation safety records are normally

maintained, is granted a general license to conduct the activities authorized in such licensing document within the State of Texas provided that:

(A) the licensing document does not limit the activity authorized by such document to specified installations or locations;

(B) the out-of-state licensee notifies the department [agency] in writing at least three working days before [~~prior to~~] engaging in such activity. If, for a specific case, the three-working-day period would impose an undue hardship on the out-of-state licensee, the licensee may, upon application to the department [agency], obtain permission to proceed sooner. The department [agency] may waive the requirement for filing additional written notifications during the remainder of the calendar year following the receipt of the initial notification from a person engaging in activities in accordance with the general license provided in this subsection. Such notification shall include:

(i) the exact location, start date, duration, and type of activity to be conducted;

(ii) the identification of the radioactive material to be used;

(iii) the name(s) and in-state address(es) of the individual(s) performing the activity;

(iv) a copy of the applicant's pertinent license;

(v) a copy of the licensee's operating, safety, and emergency procedures;

(vi) a fee as specified in §289.204 of this title; and

(vii) a copy of the completed RC Form 252-1 (Business Information Form);

(C) the out-of-state licensee complies with all applicable rules of the department [agency] and with all the terms and conditions of the licensee's licensing document, except any such terms and conditions that may be inconsistent with applicable rules of the department [agency];

(D) the out-of-state licensee supplies such other information as the department [agency] may request;

(E) the out-of-state licensee shall not transfer or dispose of radioactive material possessed or used in accordance with the general license provided in this subsection except by transfer to a person:

(i) specifically licensed by the department [agency], the NRC, or any agreement state to receive such material, or

(ii) exempt from the requirements for a license for such material in accordance with §289.251(e)(1) of this title; and

(F) the out-of-state licensee shall have the following documents in their possession at all times when conducting work in Texas, and make them available for department [agency] review upon request:

(i) a copy of the department [agency] letter granting the licensee reciprocal recognition of their out-of-state license;

(ii) a copy of the licensee's operating and emergency procedures;

(iii) a copy of the licensee's radioactive material license;

(iv) a copy of all applicable sections of 25 TAC, Chapter 289; and

(v) a copy of the completed RC Form 252-3 notifying the department [agency] of the licensee's intent to work in Texas.

(2) In addition to the provisions of paragraph (1) of this subsection, any person who holds a specific license issued by the NRC or any agreement state authorizing the holder to manufacture, transfer, install, or service the device described in §289.251(f)(4)(H) of this title or in Title 10, CFR, §150.20, within areas subject to the jurisdiction of the licensing body, is granted a general license to install, transfer, demonstrate, or service the device in the State of Texas provided that:

(A) the person files a report with the department [agency] within 30 days after the end of each calendar quarter in which any device is transferred to or installed in the State of Texas. Each report shall identify by name and address, each general licensee to whom the device is transferred, the type of device transferred by manufacturer's name, model and serial number of the device, and serial number of the sealed source, and the quantity and type of radioactive material contained in the device;

(B) the device has been manufactured, labeled, installed, and serviced in accordance with applicable provisions of the specific license issued to the person by the NRC or any agreement state;

(C) the person assures that any labels required to be affixed to the device in accordance with requirements of the authority that licensed manufacture of the device bear a statement that "Removal of this label is prohibited"; and

(D) the holder of the specific license furnishes to each general licensee to whom the holder of the specific license transfers the device, or on whose premises the holder of the specific license installs the device, a copy of the general license contained in §289.251(f)(4)(H) of this title.

(3) The department [agency] may withdraw, limit, or qualify its acceptance of any specific license or equivalent licensing document issued by another agency, or any product distributed in accordance with the licensing document, upon determining that the action is necessary in order to prevent undue hazard to occupational and public health and safety and the environment.

(ff) Preparation of radioactive material for transport. Requirements for the preparation of radioactive material for transport are specified in §289.257 of this title.

(gg) Financial assurance and record keeping for decommissioning.

(1) The applicant for a specific license or renewal of a specific license, or holder of a specific license, authorizing the possession and use of radioactive material shall submit and receive written authorization for a decommissioning funding plan as described in paragraph (4) of this subsection in an amount sufficient to allow the department [agency] to engage a third party to decommission the site(s) specified on the license for the following situations:

(A) when unsealed radioactive material requested or authorized on the license, with a half-life greater than 120 days, is in quantities exceeding 10^5 times the applicable quantities set forth in subsection (jj)(2) of this section;

(B) when a combination of the unsealed radionuclides requested or authorized on the license, with a half-life greater than 120 days, results in the R of the radionuclides divided by 10^5 being greater than 1 (unity rule), where R is defined as the sum of the ratios of the quantity of each radionuclide to the applicable value in subsection (jj)(2) of this section;

(C) when sealed sources or plated foils requested or authorized on the license, with a half-life greater than 120 days and in quantities exceeding 10^{12} times the applicable quantities set forth in subsection (jj)(2) of this section (or when a combination of isotopes is involved if R, as defined in this subsection, divided by 10^{12} is greater than 1), shall submit a decommissioning funding plan as described in paragraph (4) of this subsection; or

(D) when radioactive material requested or authorized on the license is in quantities more than 100 mCi (3.7 gigabecquerels (GBq)) of source material in a readily dispersible form.

(2) The applicant for a specific license or renewal of a specific license or the holder of a specific license authorizing possession and use of radioactive material as specified in paragraph (3) of this subsection shall either:

(A) submit a decommissioning funding plan as described in paragraph (4) of this subsection in an amount sufficient to allow the department [agency] to engage a third party to decommission the site(s) specified on the license; or

(B) submit financial assurance for decommissioning in the amount in accordance with paragraph (3) of this subsection using one of the methods described in paragraph (6) of this subsection in an amount sufficient to allow the department [agency] to engage a third party to decommission the site(s) specified on the license.

(3) The required amount of financial assurance for decommissioning is determined by the quantity of material authorized by the license and is determined as follows:

(A) \$1,125,000 for quantities of material greater than 10^4 but less than or equal to 10^5 times the applicable quantities in subsection (jj)(2) of this section in unsealed form. (For a combination of radionuclides, if R, as defined in paragraph (1) of this subsection, divided by 10^4 is greater than 1 but R divided by 10^5 is less than or equal to 1);

(B) \$225,000 for quantities of material greater than 10^3 but less than or equal to 10^4 times the applicable quantities in subsection (jj)(2) of this section in unsealed form. (For a combination of radionuclides, if R, as defined in paragraph (1) of this subsection, divided by 10^3 is greater than 1 but R divided by 10^4 is less than or equal to 1);

(C) \$113,000 for quantities of material greater than 10^{10} but less than or equal to 10^{12} times the applicable quantities in subsection (jj)(2) of this section in sealed sources or plated foils. (For a combination of radionuclides, if R, as defined in paragraph (1) of this subsection, divided by 10^{10} is greater than 1, but R divided by 10^{12} is less than or equal to 1); or

(D) \$225,000 for quantities of source material greater than 10 mCi (0.37 GBq) but less than or equal to 100 mCi (3.7 GBq) in a readily dispersible form.

(4) Each decommissioning funding plan shall:

(A) be submitted for review and approval and shall contain the following:

(i) a detailed cost estimate for decommissioning in an amount reflecting:

(I) the cost of an independent contractor to perform all decommissioning activities;

(II) the cost of meeting the criteria of §289.202(ddd)(2) of this title for unrestricted use, provided that, if the applicant or licensee can demonstrate its ability to meet the provisions

of §289.202(ddd)(3) of this title, the cost estimate may be based on meeting the criteria of §289.202(ddd)(3) of this title;

(III) the volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination; and

(IV) an adequate contingency factor.

(ii) identification of and justification for using the key assumptions contained in the detailed cost estimate;

(iii) a description of the method of assuring funds for decommissioning from paragraph (6) [(5)] of this subsection, including means for adjusting cost estimates and associated funding levels periodically over the life of the facility;

(iv) a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning; and

(v) a signed original of the financial instrument obtained to satisfy the requirements of paragraph (6) [(5)] of this subsection (unless a previously submitted and accepted financial instrument continues to cover the cost estimate for decommissioning); and

(B) at the time of license renewal and at intervals not to exceed three years, the decommissioning funding plan, be resubmitted with adjustments as necessary to account for changes in costs and the extent of contamination. If the amount of financial assurance will be adjusted downward, this cannot be done until the updated decommissioning funding plan is approved. The decommissioning funding plan shall update the information submitted with the original or prior approved plan, and shall specifically consider the effect of the following events on decommissioning costs:

(i) spills of radioactive material producing additional residual radioactivity in onsite subsurface material;

(ii) waste inventory increasing above the amount previously estimated;

(iii) waste disposal costs increasing above the amount previously estimated;

(iv) facility modifications;

(v) changes in authorized possession limits;

(vi) actual remediation costs that exceed the previous cost estimate;

(vii) onsite disposal; and

(viii) use of a settling pond.

(5) Financial assurance in conjunction with a decommissioning funding plan shall be submitted as follows:

(A) for an applicant for a specific license, financial assurance as described in paragraph (6) of this subsection, may be obtained after the application has been approved and the license issued by the department [agency], but shall be submitted to the department before [agency prior to] receipt of licensed material; or

(B) for an applicant for renewal of a specific license, or a holder of a specific license, a signed original of the financial instrument obtained to satisfy the requirements of paragraph (6) of this subsection shall be submitted with the decommissioning funding plan.

(6) Financial assurance for decommissioning shall be provided by one or more of the following methods. The financial instrument obtained shall be continuous for the term of the license in a form prescribed by the department [agency]. The applicant or licensee shall

obtain written approval of the financial instrument or any amendment to it from the department [agency].

(A) Prepayment. Prepayment is the deposit into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(B) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid. A surety method may be in the form of a surety bond, letter of credit, or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in subsection (jj)(3) of this section. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section. For commercial corporations that issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in subsection (jj)(4) of this section. For commercial companies that do not issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs may be used if the guarantee and test are as contained in subsection (jj)(5) of this section. For nonprofit entities, such as colleges, universities, and nonprofit hospitals, a guarantee of funds by the applicant or licensee may be used if the guarantee and test are as contained in subsection (jj)(6) of this section. A guarantee by the applicant or licensee may not be used in combination with any other financial methods to satisfy the requirements of this section or in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company. Any surety method or insurance used to provide financial assurance for decommissioning shall contain the following conditions.

(i) The surety method or insurance shall be opened or, if written for a specified term, such as five years, shall be renewed automatically unless 90 days or more before [prior to] the renewal date, the issuer notifies the department [agency], the beneficiary, and the licensee of its intention not to renew. The surety method or insurance shall also provide that the full face amount be paid to the beneficiary automatically before [prior to] the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the department [agency] within 30 days after receipt of notification of cancellation.

(ii) The surety method or insurance shall be payable in the State of Texas to the Radiation and Perpetual Care Account.

(iii) The surety method or insurance shall remain in effect until the department [agency] has terminated the license.

(C) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions shall be in accordance with subparagraph (B) of this paragraph.

(D) In the case of federal, state, or local government licensees, a statement of intent containing a cost estimate for decommissioning or an amount in accordance with paragraph (3) [(4)] of this

subsection, and indicating that funds for decommissioning will be obtained when necessary.

(E) When a governmental entity is assuming custody and ownership of a site, there shall be an arrangement that is deemed acceptable by such governmental entity.

(7) Each person licensed in accordance with this section shall make, maintain, and retain records of information important to the safe and effective decommissioning of the facility in an identified location for inspection by the department [agency] in accordance with subsection (mm) [§289.252(mm)] of this section. If records of relevant information are kept for other purposes, reference to these records and their locations may be used. Information the department [agency] considers important to decommissioning consists of the following:

(A) records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas, as in the case of possible seepage into porous materials such as concrete. These records shall include any known information on identification of involved nuclides, quantities, forms, and concentrations;

(B) as-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used or [and/or] stored, and of locations of possible inaccessible contamination such as buried pipes that may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations;

(C) except for areas containing only sealed sources (provided the sealed sources have not leaked or no contamination remains after any leak) or byproduct materials having only half-lives of less than 65 days, a list contained in a single document and updated every two years, of the following:

(i) all areas designated and formerly designated as restricted areas as defined in §289.201(b) of this title;

(ii) all areas outside of restricted areas that require documentation under subparagraph (A) of this paragraph;

~~[(iii) all areas outside of restricted areas where current and previous wastes have been buried as documented in accordance with; and]~~

(iii) [(iv)] all areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in §289.202(ddd) of this title, or meet the requirements for approval of disposal under §289.202(ff) - (kk) of this title; and

(D) records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds.

(8) Any licensee who has submitted an application before January 1, 1995, for renewal of license in accordance with this section shall provide financial assurance for decommissioning in accordance with paragraphs (1) and (2) of this subsection.

(hh) Emergency plan for responding to a release.

(1) A new or renewal application for each specific license to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in subsection (jj)(7) of this section shall contain either:

(A) an evaluation showing that the maximum dose to a person offsite due to a release of radioactive material would not exceed 1 rem effective dose equivalent or 5 rems to the thyroid; or

(B) an emergency plan for responding to a release of radioactive material.

(2) One or more of the following factors may be used to support an evaluation submitted in accordance with paragraph (1)(A) of this subsection:

(A) the radioactive material is physically separated so that only a portion could be involved in an accident;

(B) all or part of the radioactive material is not subject to release during an accident because of the way it is stored or packaged;

(C) the release fraction in the respirable size range would be lower than the release fraction in subsection (jj)(7) of this section due to the chemical or physical form of the material;

(D) the solubility of the radioactive material would reduce the dose received;

(E) facility design or engineered safety features in the facility would cause the release fraction to be lower than that in subsection (jj)(7) of this section;

(F) operating restrictions or procedures would prevent a release fraction as large as that in subsection (jj)(7) of this section; or

(G) other factors appropriate for the specific facility.

(3) An emergency plan for responding to a release of radioactive material submitted in accordance with paragraph (1)(B) of this subsection shall include the following information.

(A) Facility description. A brief description of the licensee's facility and area near the site.

(B) Types of accidents. An identification of each type of radioactive materials accident for which protective actions may be needed.

(C) Classification of accidents. A classification system for classifying accidents as alerts or site area emergencies.

(D) Detection of accidents. Identification of the means of detecting each type of accident in a timely manner.

(E) Mitigation of consequences. A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.

(F) Assessment of releases. A brief description of the methods and equipment to assess releases of radioactive materials.

(G) Responsibilities. A brief description of the responsibilities of licensee personnel should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the department [agency]; also, responsibilities for developing, maintaining, and updating the plan.

(H) Notification and coordination. A commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point shall be established. The notification and coordination shall be planned so that unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee shall also commit to notify

the department [agency] immediately after notification of the appropriate offsite response organizations and not later than one hour after the licensee declares an emergency. These reporting requirements do not supersede or release licensees from complying with the requirements in accordance with the Emergency Planning and Community Right-to-Know-Act of 1986, Title III, Publication L. 99-499 or other state or federal reporting requirements.

(I) Information to be communicated. A brief description of the types of information on facility status, radioactive releases, and recommended protective actions, if necessary, to be given to offsite response organizations and to the department [agency].

(J) Training. A brief description of the frequency, performance objectives, and plans for the training that the licensee will provide workers on how to respond to an emergency, including any special instructions and orientation tours the licensee would offer to fire, police, medical, and other emergency personnel. The training shall familiarize personnel with site-specific emergency procedures. Also, the training shall thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios.

(K) Safe shutdown. A brief description of the means of restoring the facility to a safe condition after an accident.

(L) Exercises. Provisions for conducting quarterly communications checks with offsite response organizations at intervals not to exceed three months and biennial onsite exercises to test response to simulated emergencies. Communications checks with offsite response organizations shall include the check and update of all necessary telephone numbers. The licensee shall invite offsite response organizations to participate in the biennial exercises. Participation of offsite response organizations in biennial exercises, although recommended, is not required. Exercises shall use accident scenarios postulated as most probable for the specific site and the scenarios shall not be known to most exercise participants. The licensee shall critique each exercise using individuals not having direct implementation responsibility for the plan. Critiques of exercises shall evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques shall be corrected.

(M) Hazardous chemicals. A certification that the applicant has met its responsibilities in accordance with the Emergency Planning and Community Right-to-Know Act of 1986, Title III, Publication L. 99-499, if applicable to the applicant's activities at the proposed place of use of the radioactive material.

(4) The licensee shall allow the offsite response organizations expected to respond in case of an accident 60 days to comment on the licensee's emergency plan before submitting it to the department [agency]. The licensee shall provide any comments received within the 60 days to the department [agency] with the emergency plan.

(ii) Physical protection of category 1 and category 2 quantities of radioactive material.

(1) Specific exemptions. A licensee that possesses radioactive waste that contains category 1 or category 2 quantities of radioactive material is exempt from the requirements of paragraphs (2) - (23) of this subsection, except that any radioactive waste that contains discrete sources, ion-exchange resins, or activated material that weighs less than 2,000 kilograms (4,409 pounds) is not exempt from the requirements of this subsection. The licensee shall implement the following requirements to secure the radioactive waste:

(A) use continuous physical barriers that allow access to the radioactive waste only through established access control points;

(B) use a locked door or gate with monitored alarm at the access control point;

(C) assess and respond to each actual or attempted unauthorized access to determine whether an actual or attempted theft, sabotage, or diversion occurred; and

(D) immediately notify the local law enforcement agency (LLEA) and request an armed response from the LLEA upon determination that there was an actual or attempted theft, sabotage, or diversion of the radioactive waste that contains category 1 or category 2 quantities of radioactive material.

(2) Personnel access authorization requirements for category 1 or category 2 quantities of radioactive material.

(A) General.

(i) Each licensee that possesses an aggregated quantity of radioactive material at or above the category 2 threshold shall establish, implement, and maintain its access authorization program in accordance with the requirements of this paragraph and paragraphs (3) - (8) of this subsection.

(ii) An applicant for a new license and each licensee that would become subject to the requirements of this paragraph and paragraphs (3) - (8) of this subsection upon application for modification of its license shall implement the requirements of this paragraph and paragraphs (3) - (8) of this subsection, as appropriate, before taking possession of an aggregated category 1 or category 2 quantity of radioactive material.

(iii) Any licensee that has not previously implemented the security orders or been subject to this paragraph and paragraphs (3) - (8) of this subsection shall implement the provisions of these paragraphs before aggregating radioactive material to a quantity that equals or exceeds the category 2 threshold.

(B) General performance objective. The licensee's access authorization program must ensure that the individuals specified in subparagraph (C)(i) of this paragraph are trustworthy and reliable.

(C) Applicability.

(i) Licensees shall subject the following individuals to an access authorization program:

(I) any individual whose assigned duties require unescorted access to category 1 or category 2 quantities of radioactive material or to any device that contains the radioactive material; and

(II) reviewing officials.

(ii) Licensees need not subject the categories of individuals listed in paragraph (6)(A)(i) - (xiii) of this subsection to the investigation elements of the access authorization program.

(iii) Licensees shall approve for unescorted access to category 1 or category 2 quantities of radioactive material only those individuals with job duties that require unescorted access to category 1 or category 2 quantities of radioactive material.

(iv) Licensees may include individuals needing access to safeguards information-modified handling in accordance with Title 10, CFR, Part 73, in the access authorization program under this paragraph and paragraphs (3) - (8) of this subsection.

(3) Access authorization program requirements.

(A) Granting unescorted access authorization.

(i) Licensees shall implement the requirements of paragraph (2), this paragraph, and paragraphs (4) - (8) of this subsection for granting initial or reinstated unescorted access authorization.

(ii) Individuals who have been determined to be trustworthy and reliable shall also complete the security training required by paragraph (10)(C) of this subsection before being allowed unescorted access to category 1 or category 2 quantities of radioactive material.)

(B) Reviewing officials.

(i) Reviewing officials are the only individuals who may make trustworthiness and reliability determinations that allow individuals to have unescorted access to category 1 or category 2 quantities of radioactive materials possessed by the licensee.

(ii) Each licensee shall name one or more individuals to be reviewing officials. After completing the background investigation on the reviewing official, the licensee shall provide to the department under oath or affirmation, a certification that the reviewing official is deemed trustworthy and reliable by the licensee. The fingerprints of the named reviewing official must be taken by a law enforcement agency, federal or state agencies that provide fingerprinting services to the public, or commercial fingerprinting services authorized by a state to take fingerprints. The licensee shall recertify that the reviewing official is deemed trustworthy and reliable every 10 years in accordance with paragraph (4)(C) of this subsection [Title 40, CFR, §37.25(e)].

(iii) Reviewing officials must be permitted to have unescorted access to category 1 or category 2 quantities of radioactive materials or access to safeguards information or safeguards information-modified handling, if the licensee possesses safeguards information or safeguards information-modified handling.

(iv) Reviewing officials cannot approve other individuals to act as reviewing officials.

(v) A reviewing official does not need to undergo a new background investigation before being named by the licensee as the reviewing official if:

(I) the individual has undergone a background investigation that included fingerprinting and a Federal Bureau of Investigation (FBI) criminal history records check and has been determined to be trustworthy and reliable by the licensee; or

(II) the individual is subject to a category listed in paragraph (6)(A) of this subsection.

(C) Informed consent.

(i) Licensees may not initiate a background investigation without the informed and signed consent of the subject individual. This consent must include authorization to share personal information with other individuals or organizations as necessary to complete the background investigation. Before a final adverse determination, the licensee shall provide the individual with an opportunity to correct any inaccurate or incomplete information that is developed during the background investigation. Licensees do not need to obtain signed consent from those individuals that meet the requirements of paragraph (4)(B) of this subsection. A signed consent must be obtained before [prior to] any reinvestigation.

(ii) The subject individual may withdraw his or her consent at any time. Licensees shall inform the individual that:

(I) if an individual withdraws his or her consent, the licensee may not initiate any elements of the background investi-

gation that were not in progress at the time the individual withdrew his or her consent; and

(II) the withdrawal of consent for the background investigation is sufficient cause for denial or termination of unescorted access authorization.

(D) Personal history disclosure. Any individual who is applying for unescorted access authorization shall disclose the personal history information that is required by the licensee's access authorization program for the reviewing official to make a determination of the individual's trustworthiness and reliability. Refusal to provide, or the falsification of, any personal history information required by paragraph (2), this paragraph, and paragraphs (4) - (8) of this subsection is sufficient cause for denial or termination of unescorted access.

(E) Determination basis.

(i) The reviewing official shall determine whether to permit, deny, unfavorably terminate, maintain, or administratively withdraw an individual's unescorted access authorization based on an evaluation of all of the information collected to meet the requirements of paragraph (2), this paragraph, and paragraphs (4) - (8) of this subsection.

(ii) The reviewing official may not permit any individual to have unescorted access until the reviewing official has evaluated all of the information collected to meet the requirements of paragraph (2), this paragraph, and paragraphs (4) - (8) of this subsection and determined that the individual is trustworthy and reliable. The reviewing official may deny unescorted access to any individual based on information obtained at any time during the background investigation.

(iii) The licensee shall document the basis for concluding whether or not there is reasonable assurance that an individual is trustworthy and reliable.

(iv) The reviewing official may terminate or administratively withdraw an individual's unescorted access authorization based on information obtained after the background investigation has been completed and the individual granted unescorted access authorization.

(v) Licensees shall maintain a list of persons currently approved for unescorted access authorization. When a licensee determines that a person no longer requires unescorted access or meets the access authorization requirement, the licensee shall:

(I) remove the person from the approved list as soon as possible, but no later than 7 working days; and

(II) take prompt measures to ensure that the individual is unable to have unescorted access to the material.

(F) Procedures. Licensees shall develop, implement, and maintain written procedures for implementing the access authorization program. The procedures must:

(i) include provisions for the notification of individuals who are denied unescorted access;

(ii) include provisions for the review, at the request of the affected individual, of a denial or termination of unescorted access authorization; and

(iii) contain a provision to ensure that the individual is informed of the grounds for the denial or termination of unescorted access authorization and allow the individual an opportunity to provide additional relevant information.

(G) Right to correct and complete information.

(i) ~~Before~~ [Prior to] any final adverse determination, licensees shall provide each individual subject to paragraph (2), this paragraph, and paragraphs (4) - (8) of this subsection with the right to complete, correct, and explain information obtained as a result of the licensee's background investigation. Confirmation of receipt by the individual of this notification must be maintained by the licensee for inspection by the department [agency] in accordance with subsection (mm) of this section.

(ii) If, after reviewing his or her criminal history record, an individual believes that it is incorrect or incomplete in any respect and wishes to change, correct, update, or explain anything in the record, the individual may initiate challenge procedures. These procedures include direct application by the individual challenging the record to the law enforcement agency that contributed the questioned information or a direct challenge as to the accuracy or completeness of any entry on the criminal history record to the Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Division, ATTN: SCU, Mod. D-2, 1000 Custer Hollow Road, Clarksburg, WV 26306 as set forth in Title 28, CFR, §§16.30 - 16.34. In the latter case, the FBI will forward the challenge to the agency that submitted the data, and will request that the agency verify or correct the challenged entry. Upon receipt of an official communication directly from the agency that contributed the original information, the FBI Identification Division makes any changes necessary in accordance with the information supplied by that agency. Licensees shall provide at least 10 days for an individual to initiate action to challenge the results of an FBI criminal history records check after the record being made available for his or her review. The licensee may make a final adverse determination based upon the criminal history records only after receipt of the FBI's confirmation or correction of the record.

(H) Records. The licensee shall make, maintain, and retain the following records/documents for inspection by the department [agency] in accordance with subsection (mm) of this section. The licensee shall maintain superseded versions or portions of the following records/documents for inspection by the department [agency] in accordance with subsection (mm) of this section:

(i) documentation regarding the trustworthiness and reliability of individual employees;

(ii) a copy of the current access authorization program procedures; and

(iii) the current list of persons approved for unescorted access authorization.

(4) Background investigations.

(A) Initial investigation. Before allowing an individual unescorted access to category 1 or category 2 quantities of radioactive material or to the devices that contain the material, licensees shall complete a background investigation of the individual seeking unescorted access authorization. The scope of the investigation must encompass at least the seven [7] years preceding the date of the background investigation or since the individual's eighteenth birthday, whichever is shorter. The background investigation must include at a minimum:

(i) fingerprinting and an FBI identification and criminal history records check in accordance with paragraph (5) of this subsection;

(ii) verification of true identity. Licensees shall:

(I) verify the true identity of the individual who is applying for unescorted access authorization to ensure that the applicant is who he or she claims to be;

(II) review official identification documents (e.g., driver's license; passport; government identification; certificate of birth issued by the state, province, or country of birth) and compare the documents to personal information data provided by the individual to identify any discrepancy in the information;

(III) document the type, expiration, and identification number of the identification document, or maintain a photocopy of identifying documents on file in accordance with paragraph (7) of this subsection;

(IV) certify in writing that the identification was properly reviewed; and

(V) maintain the certification and all related documents for inspection by the department [agency] in accordance with subsection (mm) of this section;

(iii) employment history verification. Licensees shall:

(I) complete an employment history verification, including military history; and

(II) verify the individual's employment with each previous employer for the most recent 7 years before the date of application;

(iv) verification of education. Licensees shall verify that the individual participated in the education process during the claimed period;

(v) character and reputation determination. Licensees shall complete reference checks to determine the character and reputation of the individual who has applied for unescorted access authorization. Unless other references are not available, reference checks may not be conducted with any person who is known to be a close member of the individual's family, including [~~but not limited to~~] the individual's spouse, parents, siblings, or children, or any individual who resides in the individual's permanent household. Reference checks as specified in paragraphs (2) and (3), this paragraph, and paragraphs (5) - (8) of this subsection must be limited to whether the individual has been and continues to be trustworthy and reliable;

(vi) the licensee shall also, to the extent possible, obtain independent information to corroborate that provided by the individual (e.g., seek references not supplied by the individual); and

(vii) if a previous employer, educational institution, or any other entity with which the individual claims to have been engaged fails to provide information or indicates an inability or unwillingness to provide information within a time frame deemed appropriate by the licensee but at least after 10 business days of the request or if the licensee is unable to reach the entity, the licensee shall document the refusal, unwillingness, or inability in the record of investigation; and attempt to obtain the information from an alternate source.

(B) Grandfathering.

(i) Individuals who have been determined to be trustworthy and reliable for unescorted access to category 1 or category 2 quantities of radioactive material as specified in the fingerprint orders may continue to have unescorted access to category 1 and category 2 quantities of radioactive material without further investigation. These individuals shall be subject to the reinvestigation requirement.

(ii) Individuals who have been determined to be trustworthy and reliable in accordance with Title 10, CFR, Part 73, or the security orders for access to safeguards information, safeguards information-modified handling, or risk-significant material may have unescorted access to category 1 and category 2 quantities of

radioactive material without further investigation. The licensee shall document that the individual was determined to be trustworthy and reliable under Title 10, CFR, Part 73, or a security order. Security order, in this context, refers to any order that was issued by the NRC that required fingerprints and an FBI criminal history records check for access to safeguards information, safeguards information-modified handling, or risk significant material such as special nuclear material or large quantities of uranium hexafluoride. These individuals shall be subject to the reinvestigation requirement.

(C) Reinvestigations. Licensees shall conduct a reinvestigation every 10 years for any individual with unescorted access to category 1 or category 2 quantities of radioactive material. The reinvestigation shall consist of fingerprinting and an FBI identification and criminal history records check in accordance with paragraph (5) of this subsection. The reinvestigations must be completed within 10 years of the date on which these elements were last completed.

(5) Requirements for criminal history records checks of individuals granted unescorted access to category 1 or category 2 quantities of radioactive material.

(A) General performance objective and requirements.

(i) Except for those individuals listed in paragraph (6) of this subsection and those individuals grandfathered under paragraph (4)(B) of this subsection, each licensee subject to the requirements of paragraphs (2) - (4), this paragraph, and paragraphs (6) - (8) of this subsection shall:

(I) fingerprint each individual who is to be permitted unescorted access to category 1 or category 2 quantities of radioactive material;

(II) transmit all collected fingerprints to the NRC for transmission to the FBI; and

(III) use the information received from the FBI as part of the required background investigation to determine whether to grant or deny further unescorted access to category 1 or category 2 quantities of radioactive materials for that individual.

(ii) The licensee shall notify each affected individual that his or her fingerprints will be used to secure a review of his or her criminal history record, and shall inform him or her of the procedures for revising the record or adding explanations to the record.

(iii) Fingerprinting is not required if a licensee is reinstating an individual's unescorted access authorization to category 1 or category 2 quantities of radioactive materials if:

(I) the individual returns to the same facility that granted unescorted access authorization within 365 days of the termination of his or her unescorted access authorization; and

(II) the previous access was terminated under favorable conditions.

(iv) Fingerprints do not need to be taken if an individual who is an employee of a licensee, contractor, manufacturer, or supplier has been granted unescorted access to category 1 or category 2 quantities of radioactive material, access to safeguards information, or safeguards information-modified handling by another licensee, based upon a background investigation conducted in accordance with paragraphs (2) - (4), this paragraph, and paragraphs (6) - (8) of this subsection, the fingerprint orders, or Title 10, CFR, Part 73. An existing criminal history records check file may be transferred to the licensee asked to grant unescorted access in accordance with the requirements of paragraph (7)(C) of this subsection.

(v) Licensees shall use the information obtained as part of a criminal history records check solely for the purpose of determining an individual's suitability for unescorted access authorization to category 1 or category 2 quantities of radioactive materials, access to safeguards information, or safeguards information-modified handling.

(B) Prohibitions.

(i) Licensees may not base a final determination to deny an individual unescorted access authorization to category 1 or category 2 quantities of radioactive material solely on the basis of information received from the FBI involving:

(I) an arrest more than one year old for which there is no information of the disposition of the case; or

(II) an arrest that resulted in dismissal of the charge or an acquittal.

(ii) Licensees may not use information received from a criminal history records check obtained under paragraphs (2) - (4), this paragraph, and paragraphs (6) - (8) of this subsection in a manner that would infringe upon the rights of any individual under the First Amendment to the Constitution of the United States, nor shall licensees use the information in any way that would discriminate among individuals on the basis of race, religion, national origin, gender, or age.

(C) Procedures for processing of fingerprint checks.

(i) For the purpose of complying with paragraphs (2) - (4), this paragraph, and paragraphs (6) - (8) of this subsection, licensees shall use an appropriate method listed in Title 10, CFR, §37.7, to submit to the U.S. Nuclear Regulatory Commission, Director, Division of Physical ~~Facilities~~ and Cyber Security Policy, 11545 Rockville Pike, ATTN: Criminal History Program/Mail Stop T-07D04M ~~[T-03B46M]~~, 11545 Rockville Pike, Rockville, Maryland 20852 ~~[20852-2738]~~, one completed, legible standard fingerprint card (Form FD-258, ORIMDNRCOOOZ), electronic fingerprint scan or, where practicable, other fingerprint record for each individual requiring unescorted access to category 1 or category 2 quantities of radioactive material. Copies of these forms may be obtained by emailing MAILSVS.Resource@nrc.gov ~~[writing the Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, by calling (630) 829-9565, or by email to FORMS.Resource@nrc.gov]~~. Guidance on submitting electronic fingerprints can be found at <https://www.nrc.gov/security/chp.html> ~~[http://www.nrc.gov/site-help/e-submittals.html]~~.

(ii) Fees for the processing of fingerprint checks are due upon application. Licensees shall submit payment with the application for the processing of fingerprints through corporate check, certified check, cashier's check, money order, or electronic payment, made payable to "U.S. NRC." (For guidance on making electronic payments, contact the ~~[Security Branch,]~~ Division of Physical ~~Facilities~~ and Cyber Security Policy by emailing Crimhist.Resource@nrc.gov ~~[at (301) 415-7513]~~.) Combined payment for multiple applications is acceptable. The NRC publishes the amount of the fingerprint check application fee on the NRC's public website. (To find the current fee amount, go to the Licensee Criminal History Records Checks & Firearms Background Check information page at <https://www.nrc.gov/security/chp.html> ~~[Electronic Submittals page at http://www.nrc.gov/site-help/e-submittals.html]~~ and see the link for [How do I determine how much to pay for the request?](#).) ~~[the Criminal History Program under Electronic Submission Systems.]~~

(iii) The NRC will forward to the submitting licensee all data received from the FBI as a result of the licensee's application(s) for criminal history records checks.

(6) Relief from fingerprinting, identification, and criminal history records checks and other elements of background investigations for designated categories of individuals permitted unescorted access to certain radioactive materials.

(A) Fingerprinting, and the identification and criminal history records checks required by Section 149 of the Atomic Energy Act of 1954, as amended, and other elements of the background investigation are not required for the following individuals before [prior to] granting unescorted access to category 1 or category 2 quantities of radioactive materials:

(i) an employee of the NRC or of the Executive Branch of the U.S. Government who has undergone fingerprinting for a prior U.S. Government criminal history records check;

(ii) a member of Congress;

(iii) an employee of a member of Congress or Congressional committee who has undergone fingerprinting for a prior U.S. Government criminal history records check;

(iv) the governor of a state or his or her designated state employee representative;

(v) federal, state, or local law enforcement personnel;

(vi) state radiation control program directors and state homeland security advisors or their designated state employee representatives;

(vii) agreement state employees conducting security inspections on behalf of the NRC under an agreement executed as specified in §274.1 [§274.i.] of the Atomic Energy Act;

(viii) representatives of the International Atomic Energy Agency (IAEA) engaged in activities associated with the U.S./IAEA Safeguards Agreement who have been certified by the NRC;

(ix) emergency response personnel who are responding to an emergency;

(x) commercial vehicle drivers for road shipments of category 1 and category 2 quantities of radioactive material;

(xi) package handlers at transportation facilities such as freight terminals and railroad yards;

(xii) any individual who has an active federal security clearance, provided that he or she makes available the appropriate documentation. Written confirmation from the agency/employer that granted the federal security clearance or reviewed the criminal history records check must be provided to the licensee. The licensee shall maintain this documentation for inspection by the department [agency] in accordance with subsection (mm) of this section; and

(xiii) any individual employed by a service provider licensee for which the service provider licensee has conducted the background investigation for the individual and approved the individual for unescorted access to category 1 or category 2 quantities of radioactive material. Written verification from the service provider must be provided to the licensee. The licensee shall maintain and retain the documentation for inspection by the department [agency] in accordance with subsection (mm) of this section.

(B) Fingerprinting, and the identification and criminal history records checks required by Section 149 of the Atomic Energy Act of 1954, as amended, are not required for an individual who has had a favorably adjudicated U.S. Government criminal history records check within the last 5 years, under a comparable U.S. Government

program involving fingerprinting and an FBI identification and criminal history records check provided that he or she makes available the appropriate documentation. Written confirmation from the agency/employer that reviewed the criminal history records check must be provided to the licensee. The licensee shall maintain this documentation for inspection by the department [agency] in accordance with subsection (mm) of this section. These programs include[; but are not limited to]:

(i) National Agency Check;

(ii) Transportation Worker Identification Credentials (TWIC) under Title 49, CFR, Part 1572;

(iii) Bureau of Alcohol, Tobacco, Firearms, and Explosives background check and clearances under Title 27, CFR, Part 555;

(iv) Health and Human Services security risk assessments for possession and use of select agents and toxins under Title 42, CFR, Part 73;

(v) Hazardous Material security threat assessment for hazardous material endorsement to commercial driver's [drivers] license under Title 49, CFR, Part 1572; and

(vi) Customs and Border Protection's Free and Secure Trade (FAST) Program.

(7) Protection of information.

(A) Each licensee who obtains background information on an individual under paragraphs (2) - (6), this paragraph, or paragraph (8) of this subsection shall establish and maintain a system of files and written procedures for protection of the record and the personal information from unauthorized disclosure.

(B) The licensee may not disclose the record or personal information collected and maintained to persons other than the subject individual, his or her representative, or to those who have a need to have access to the information in performing assigned duties in the process of granting or denying unescorted access to category 1 or category 2 quantities of radioactive material, safeguards information, or safeguards information-modified handling. No individual authorized to have access to the information may disseminate the information to any other individual who does not have a need to know.

(C) The personal information obtained on an individual from a background investigation may be provided to another licensee:

(i) upon the individual's written request to the licensee holding the data to disseminate the information contained in his or her file; and

(ii) the recipient licensee verifies information such as name, date of birth, social security number, gender, and other applicable physical characteristics.

(D) The licensee shall make background investigation records obtained under paragraphs (2) - (6), this paragraph, and paragraph (8) of this subsection available for examination by an authorized representative of the department [agency] to determine compliance with the regulations and laws.

(E) The licensee shall maintain all fingerprint and criminal history records on an individual (including data indicating no record) received from the FBI, or a copy of these records if the individual's file has been transferred, for inspection by the department [agency] in accordance with subsection (mm) of this section.

(8) Access authorization program review.

(A) Each licensee shall be responsible for the continuing effectiveness of the access authorization program. Each licensee shall ensure that access authorization programs are reviewed to confirm compliance with the requirements of paragraphs (2) - (7) and this paragraph of this subsection and that comprehensive actions are taken to correct any noncompliance that is identified. The review program shall evaluate all program performance objectives and requirements. Each licensee shall review the access program content and implementation at least every 12 months.

(B) The results of the reviews, along with any recommendations, must be documented. Each review report must identify conditions that are adverse to the proper performance of the access authorization program, the cause of the condition(s), and, when appropriate, recommend corrective actions, and corrective actions taken. The licensee shall review the findings and take any additional corrective actions necessary to preclude repetition of the condition, including re-assessment of the deficient areas where indicated.

(C) Review records must be maintained for inspection by the department [agency] in accordance with subsection (mm) of this section.

(9) Security program.

(A) Applicability.

(i) Each licensee that possesses an aggregated category 1 or category 2 quantity of radioactive material shall establish, implement, and maintain a security program in accordance with the requirements of this paragraph and paragraphs (10) - (17) of this subsection.

(ii) An applicant for a new license and each licensee that would become newly subject to the requirements of this paragraph and paragraphs (10) - (17) of this subsection upon application for modification of its license shall implement the requirements of this paragraph and paragraphs (10) - (17) of this subsection, as appropriate, before taking possession of an aggregated category 1 or category 2 quantity of radioactive material.

(iii) Any licensee that has not previously implemented the security orders or been subject to the provisions of this paragraph and paragraphs (10) - (17) of this subsection shall provide written notification to the department [agency] at least 90 days before aggregating radioactive material to a quantity that equals or exceeds the category 2 threshold.

(B) General performance objective. Each licensee shall establish, implement, and maintain a security program that is designed to monitor and, without delay, detect, assess, and respond to an actual or attempted unauthorized access to category 1 or category 2 quantities of radioactive material.

(C) Program features. Each licensee's security program must include the program features, as appropriate, described in paragraphs (10) - (16) of this subsection.

(10) General security program requirements.

(A) Security plan.

(i) Each licensee identified in paragraph (9)(A) of this subsection shall develop a written security plan specific to its facilities and operations. The purpose of the security plan is to establish the licensee's overall security strategy to ensure the integrated and effective functioning of the security program required by paragraph (9), this paragraph, and paragraphs (11) - (17) of this subsection. The security plan must, at a minimum:

(I) describe the measures and strategies used to implement the requirements of paragraph (9), this paragraph, and paragraphs (11) - (17) of this subsection; and

(II) identify the security resources, equipment, and technology used to satisfy the requirements of paragraph (9), this paragraph, and paragraphs (11) - (17) of this subsection.

(ii) The security plan must be reviewed and approved by the individual with overall responsibility for the security program.

(iii) A licensee shall revise its security plan as necessary to ensure the effective implementation of department [agency] and NRC requirements. The licensee shall ensure that:

(I) the revision has been reviewed and approved by the individual with overall responsibility for the security program; and

(II) the affected individuals are instructed on the revised plan before the changes are implemented.

(iv) The licensee shall maintain a copy of the current security plan as a record for inspection by the department [agency] in accordance with subsection (mm) of this section. If any portion of the plan is superseded, the licensee shall maintain the superseded material for inspection by the department [agency] in accordance with subsection (mm) of this section.

(B) Implementing procedures.

(i) The licensee shall develop and maintain written procedures that document how the requirements of paragraph (9), this paragraph, and paragraphs (11) - (17) of this subsection and the security plan will be met.

(ii) The implementing procedures and revisions to these procedures must be approved in writing by the individual with overall responsibility for the security program.

(iii) The licensee shall maintain a copy of the current procedure as a record for inspection by the department [agency] in accordance with subsection (mm) of this section. Superseded portions of the procedure shall be maintained for inspection by the department [agency] in accordance with subsection (mm) of this section.

(C) Training.

(i) Each licensee shall conduct training to ensure that those individuals implementing the security program possess and maintain the knowledge, skills, and abilities to carry out their assigned duties and responsibilities effectively. The training must include instruction in:

(I) the licensee's security program and procedures to secure category 1 or category 2 quantities of radioactive material, and in the purposes and functions of the security measures employed;

(II) the responsibility to report promptly to the licensee any condition that causes or may cause a violation of the requirements of the department [agency];

(III) the responsibility of the licensee to report promptly to the local law enforcement agency and licensee any actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material; and

(IV) the appropriate response to security alarms.

(ii) In determining those individuals who shall be trained on the security program, the licensee shall consider each in-

dividual's assigned activities during authorized use and response to potential situations involving actual or attempted theft, diversion, or sabotage of category 1 or category 2 quantities of radioactive material. The extent of the training must be commensurate with the individual's potential involvement in the security of category 1 or category 2 quantities of radioactive material.

(iii) Refresher training must be provided at a frequency not to exceed 12 months and when significant changes have been made to the security program. This training must include:

(I) review of the training requirements of this subparagraph of this paragraph and any changes made to the security program since the last training;

(II) reports on any relevant security issues, problems, and lessons learned;

(III) relevant results of inspections by the department [agency]; and

(IV) relevant results of the licensee's program review and testing and maintenance.

(iv) The licensee shall maintain records of the initial and refresher training for inspection by the department [agency] in accordance with subsection (mm) of this section. The training records shall include:

(I) the dates of the training;

(II) the topics covered;

(III) a list of licensee personnel in attendance;

and

(IV) any related information.

(D) Protection of information.

(i) Licensees authorized to possess category 1 or category 2 quantities of radioactive material shall limit access to and unauthorized disclosure of their security plan, implementing procedures, and the list of individuals that have been approved for unescorted access.

(ii) Efforts to limit access shall include the development, implementation, and maintenance of written policies and procedures for controlling access to, and for proper handling and protection against unauthorized disclosure of, the security plan, [and] implementing procedures, and the list of individuals that have been approved for unescorted access.

(iii) Before granting an individual access to the security plan, [ø] implementing procedures, or the list of individuals that have been approved for unescorted access, licensees shall:

(I) evaluate an individual's need to know the security plan, [ø] implementing procedures, or the list of individuals that have been approved for unescorted access; and

(II) if the individual has not been authorized for unescorted access to category 1 or category 2 quantities of radioactive material, safeguards information, or safeguards information-modified handling, the licensee must complete a background investigation to determine the individual's trustworthiness and reliability. A trustworthiness and reliability determination shall be conducted by the reviewing official and shall include the background investigation elements contained in paragraph (4)(A)(ii) - (vii) of this subsection.

(iv) Licensees need not subject the following individuals to the background investigation elements for protection of information:

(I) the categories of individuals listed in paragraph (6)(A)(i) - (xiii) of this subsection; or

(II) security service provider employees, provided written verification that the employee has been determined to be trustworthy and reliable, by the required background investigation in paragraph (4)(A)(ii) - (vii) of this subsection, has been provided by the security service provider.

(v) The licensee shall document the basis for concluding that an individual is trustworthy and reliable and should be granted access to the security plan, [ø] implementing procedures, or the list of individuals that have been approved for unescorted access.

(vi) Licensees shall maintain a list of persons currently approved for access to the security plan, [ø] implementing procedures, or the list of individuals that have been approved for unescorted access. When a licensee determines that a person no longer needs access to the security plan, [ø] implementing procedures, and the list of individuals that have been approved for unescorted access, or no longer meets the access authorization requirements for access to the information, the licensee shall:

(I) remove the person from the approved list as soon as possible, but no later than 7 working days; and

(II) take prompt measures to ensure that the individual is unable to obtain the security plan, [ø] implementing procedures, or the list of individuals that have been approved for unescorted access.

(vii) When not in use, the licensee shall store its security plan, [and] implementing procedures, and the list of individuals that have been approved for unescorted access in a manner to prevent unauthorized access. Information stored in nonremovable electronic form shall be password protected.

(viii) The licensee shall make, maintain, and retain as a record for inspection by the department [agency] in accordance with subsection (mm) of this section:

(I) a copy of the information protection procedures; and

(II) the list of individuals approved for access to the security plan, [ø] implementing procedures, or the list of individuals that have been approved for unescorted access.

(11) LLEA coordination.

(A) A licensee subject to paragraphs (9) and (10), this paragraph, and paragraphs (12) - (17) of this subsection shall coordinate, to the extent practicable, with an LLEA for responding to threats to the licensee's facility, including any necessary armed response. The information provided to the LLEA must include:

(i) a description of the facilities and the category 1 and category 2 quantities of radioactive materials along with a description of the licensee's security measures that have been implemented to comply with paragraphs (9) and (10), this paragraph, and paragraphs (12) - (17) of this subsection; and

(ii) a notification that the licensee will request a timely armed response by the LLEA to any actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of material.

(B) The licensee shall notify the department [agency] within three [3] business days if:

(i) the LLEA has not responded to the request for coordination within 60 days of the coordination request; or

(ii) the LLEA notifies the licensee that the LLEA does not plan to participate in coordination activities.

(C) The licensee shall document its efforts to coordinate with the LLEA. The documentation must be kept for inspection by the department [agency] in accordance with subsection (mm) of this section.

(D) The licensee shall coordinate with the LLEA at least every 12 months, or when changes to the facility design or operation adversely affect the potential vulnerability of the licensee's material to theft, sabotage, or diversion.

(12) Security zones.

(A) Licensees shall ensure that all aggregated category 1 and category 2 quantities of radioactive material are used or stored within licensee established security zones. Security zones may be permanent or temporary.

(B) Temporary security zones shall be established as necessary to meet the licensee's transitory or intermittent business activities, such as periods of maintenance, source delivery, and source replacement.

(C) Security zones must, at a minimum, allow unescorted access only to approved individuals through:

(i) isolation of category 1 and category 2 quantities of radioactive materials by the use of continuous physical barriers that allow access to the security zone only through established access control points. A physical barrier is a natural or man-made structure or formation sufficient for the isolation of the category 1 or category 2 quantities of radioactive material within a security zone; or

(ii) direct control of the security zone by approved individuals at all times; or

(iii) a combination of continuous physical barriers and direct control.

(D) For category 1 quantities of radioactive material during periods of maintenance, source receipt, preparation for shipment, installation, or source removal or exchange, the licensee shall, at a minimum, provide sufficient individuals approved for unescorted access to maintain continuous surveillance of sources in temporary security zones and in any security zone in which physical barriers or intrusion detection systems have been disabled to allow such activities.

(E) Individuals not approved for unescorted access to category 1 or category 2 quantities of radioactive material must be escorted by an approved individual when in a security zone.

(13) Monitoring, detection and assessment.

(A) Monitoring and detection.

(i) Licensees shall:

(I) establish and maintain the capability to continuously monitor and detect without delay all unauthorized entries into its security zones;

(II) provide the means to maintain continuous monitoring and detection capability in the event of a loss of the primary power source; or

(III) provide for an alarm and response in the event of a loss of this capability to continuously monitor and detect unauthorized entries.

(ii) Monitoring and detection must be performed by:

(I) a monitored intrusion detection system that is linked to an onsite or offsite central monitoring facility;

(II) electronic devices for intrusion detection alarms that will alert nearby facility personnel;

(III) a monitored video surveillance system;

(IV) direct visual surveillance by approved individuals located within the security zone; or

(V) direct visual surveillance by a licensee designated individual located outside the security zone.

(iii) A licensee subject to paragraphs (9) - (12), this paragraph, and paragraphs (14) - (17) of this subsection shall also have a means to detect unauthorized removal of the radioactive material from the security zone. This detection capability must provide:

(I) for category 1 quantities of radioactive material, immediate detection of any attempted unauthorized removal of the radioactive material from the security zone. Such immediate detection capability must be provided by:

(-a-) electronic sensors linked to an alarm;

(-b-) continuous monitored video surveillance; or

(-c-) direct visual surveillance; and

(II) for category 2 quantities of radioactive material, weekly verification through physical checks, tamper indicating devices, use, or other means to ensure that the radioactive material is present.

(B) Assessment. Licensees shall immediately assess each actual or attempted unauthorized entry into the security zone to determine whether the unauthorized access was an actual or attempted theft, sabotage, or diversion.

(C) Personnel communications and data transmission. For personnel and automated or electronic systems supporting the licensee's monitoring, detection, and assessment systems, licensees shall:

(i) maintain continuous capability for personnel communication and electronic data transmission and processing among site security systems; and

(ii) provide an alternative communication capability for personnel, and an alternative data transmission and processing capability, in the event of a loss of the primary means of communication or data transmission and processing. Alternative communications and data transmission systems may not be subject to the same failure modes as the primary systems.

(D) Response. Licensees shall immediately respond to any actual or attempted unauthorized access to the security zones, or actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material at licensee facilities or temporary job sites. For any unauthorized access involving an actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material, the licensee's response shall include requesting, without delay, an armed response from the LLEA.

(14) Maintenance and testing.

(A) Each licensee subject to paragraphs (9) - (13), this paragraph, and paragraphs (15) - (17) of this subsection shall implement a maintenance and testing program to ensure that intrusion alarms, associated communication systems, and other physical components of the systems used to secure or detect unauthorized access to radioactive material are maintained in operable condition and are capable of per-

forming their intended function when needed. The equipment relied on to meet the security requirements of this subsection must be inspected and tested for operability and performance at the manufacturer's suggested frequency. If there is no suggested manufacturer's suggested frequency, the testing must be performed at least annually, not to exceed 12 months.

(B) The licensee shall maintain records on the maintenance and testing activities for inspection by the department [agency] in accordance with subsection (mm) of this section.

(15) Requirements for mobile devices. Each licensee that possesses mobile devices containing category 1 or category 2 quantities of radioactive material shall:

(A) have two independent physical controls that form tangible barriers to secure the material from unauthorized removal when the device is not under direct control and constant surveillance by the licensee; and

(B) for devices in or on a vehicle or trailer, unless the health and safety requirements for a site prohibit the disabling of the vehicle, the licensee shall utilize a method to disable the vehicle or trailer when not under direct control and constant surveillance by the licensee. Licensees shall not rely on the removal of an ignition key to meet this requirement.

(16) Security program review.

(A) Each licensee shall be responsible for the continuing effectiveness of the security program. Each licensee shall ensure that the security program is reviewed to confirm compliance with the requirements of paragraphs (9) - (15), this paragraph, and paragraph (17) of this subsection, and that comprehensive actions are taken to correct any noncompliance that is identified. The review shall include the radioactive material security program content and implementation. Each licensee shall review the security program content and implementation at least every 12 months.

(B) The results of the review, along with any recommendations, must be documented.

(i) Each review report must

(I) identify conditions that are adverse to the proper performance of the security program;

(II) identify the cause of the condition(s); and

(III) when applicable, recommend corrective actions, and identify and document any corrective actions taken.

(ii) The licensee shall review the findings and take any additional corrective actions necessary to preclude repetition of the condition, including reassessment of the deficient areas where indicated.

(C) The licensee shall make, maintain, and retain the documentation of the review required under subparagraph (B) of this paragraph for inspection by the department [agency] in accordance with subsection (mm) of this section.

(17) Reporting of events.

(A) The licensee shall immediately notify the LLEA after determining that an unauthorized entry resulted in an actual or attempted theft, sabotage, or diversion of a category 1 or category 2 quantity of radioactive material. As soon as possible after initiating a response, but not at the expense of causing delay or interfering with the LLEA response to the event, the licensee shall notify the department [agency] at (512) 458-7460. In no case shall the notification to the

department [agency] be later than four [4] hours after the discovery of any attempted or actual theft, sabotage, or diversion.

(B) The licensee shall assess any suspicious activity related to possible theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material and notify the LLEA as appropriate. As soon as possible but not later than 4 hours after notifying the LLEA, the licensee shall notify the department [agency] at (512) 458-7460.

(C) Each initial telephonic notification required by subparagraphs (A) and (B) of this paragraph must be followed within a period of 30 days by a written report submitted to the department [agency]. The report must include sufficient information for department [agency] analysis and evaluation, including identification of any necessary corrective actions to prevent future instances.

(18) Additional requirements for transfer of category 1 and category 2 quantities of radioactive material. A licensee transferring a category 1 or category 2 quantity of radioactive material to a licensee of the department [agency], the NRC, or any agreement state shall meet the license verification requirements listed below instead of those listed in subsection (cc)(4) of this section.

(A) Any licensee transferring category 1 quantities of radioactive material to a licensee of the department [agency], the NRC, or any agreement state, ~~before [prior to]~~ conducting such transfer, shall verify with the NRC's license verification system or the license issuing authority that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred and that the licensee is authorized to receive radioactive material at the location requested for delivery. If the verification is conducted by contacting the license issuing authority, the transferor shall document the verification. For transfers within the same organization, the licensee does not need to verify the transfer.

(B) Any licensee transferring category 2 quantities of radioactive material to a licensee of the department [agency], the NRC, or any agreement state, ~~before [prior to]~~ conducting such transfer, shall verify with the NRC's license verification system or the license issuing authority that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred. If the verification is conducted by contacting the license issuing authority, the transferor shall document the verification. For transfers within the same organization, the licensee does not need to verify the transfer.

(C) In an emergency where the licensee cannot reach the license issuing authority and the license verification system is non-functional, the licensee may accept a written certification by the transferee that it is authorized by license to receive the type, form, and quantity of radioactive material to be transferred.

(i) The certification must include:

(I) the license number;

(II) the current revision number;

(III) the issuing authority;

(IV) the expiration date; and

(V) for a category 1 shipment, the authorized address.

(ii) The licensee shall keep a copy of the certification.

(iii) The certification must be confirmed by use of the NRC's license verification system or by contacting the license issuing authority by the end of the next business day.

(D) The transferor shall keep a copy of the verification documentation required under this paragraph as a record for inspection by the department [agency] in accordance with subsection (mm) of this section.

(19) Applicability of physical protection of category 1 and category 2 quantities of radioactive material during transit. The shipping licensee shall be responsible for meeting the requirements of paragraph (18), this paragraph, and paragraphs (20) - (23) of this subsection unless the receiving licensee has agreed in writing to arrange for the in-transit physical protection required under this paragraph, and paragraphs (20) - (23) of this subsection.

(20) Preplanning and coordination of shipment of category 1 and category 2 quantities of radioactive material.

(A) Each licensee that plans to transport, or deliver to a carrier for transport, licensed material that is a category 1 quantity of radioactive material outside the confines of the licensee's facility or other place of use or storage shall:

(i) preplan and coordinate shipment arrival and departure times with the receiving licensee;

(ii) preplan and coordinate shipment information with the governor or the governor's designee of any state through which the shipment will pass to:

(I) discuss the state's intention to provide law enforcement escorts; and

(II) identify safe havens; and

(iii) document the preplanning and coordination activities.

(B) Each licensee that plans to transport, or deliver to a carrier for transport, licensed material that is a category 2 quantity of radioactive material outside the confines of the licensee's facility or other place of use or storage shall coordinate the shipment no-later-than arrival time and the expected shipment arrival with the receiving licensee. The licensee shall document the coordination activities.

(C) Each licensee who receives a shipment of a category 2 quantity of radioactive material shall confirm receipt of the shipment with the originator. If the shipment has not arrived by the no-later-than arrival time, the receiving licensee shall notify the originator.

(D) Each licensee, who transports or plans to transport a shipment of a category 2 quantity of radioactive material, and determines that the shipment will arrive after the no-later-than arrival time provided pursuant to subparagraph (B) of this paragraph, shall promptly notify the receiving licensee of the new no-later-than arrival time.

(E) The licensee shall make, maintain, and retain a copy of the documentation for preplanning and coordination and any revision thereof, as a record for inspection by the department [agency] in accordance with subsection (mm) of this section.

(21) Advance notification of shipment of category 1 quantities of radioactive material. As specified in subparagraphs (A) and (B) of this paragraph, for shipments initially made by an agreement state licensee, each licensee shall provide advance notification to the Texas Department of Public Safety and the governor of the State of Texas, or the governor's designee, of the shipment of licensed material in a category 1 quantity, through or across the boundary of the state, before the transport, or delivery to a carrier for transport of the licensed material outside the confines of the licensee's facility or other place of use or storage.

(A) Procedures for submitting advance notification.

(i) The notification must be made to the Texas Department of Public Safety and to the office of each appropriate governor or governor's designee.

(I) The contact information, including telephone and mailing addresses, of governors and governors' designees, is available on the NRC's Web site at <https://scp.nrc.gov/special/designee.pdf>. A list of agreement state advance notification contact information is also available upon request from the Director, Division of Materials Safety, Security, State, and Tribal Programs [~~Division of Material Safety, State, Tribal, and Rulemaking Programs~~], Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

(II) Notifications to the Texas Department of Public Safety must be to the Director, Texas Department of Public Safety, Office of Homeland Security, P.O. Box 4087, Austin, Texas 78773 or by fax to (512) 424-5708.

(ii) A notification delivered by mail must be post-marked at least seven [7] days before transport of the shipment commences at the shipping facility.

(iii) A notification delivered by any means other than mail must reach the Texas Department of Public Safety at least four [4] days before the transport of the shipment commences; and

(iv) A notification delivered by any means other than mail must reach the office of the governor or the governor's designee at least four [4] days before transport of a shipment within or through the state.

(B) Information to be furnished in advance notification of shipment. Each advance notification of shipment of category 1 quantities of radioactive material must contain the following information, if available at the time of notification:

(i) the name, address, and telephone number of the shipper, carrier, and receiver of the category 1 radioactive material;

(ii) the license numbers of the shipper and receiver;

(iii) a description of the radioactive material contained in the shipment, including the radionuclides and quantity;

(iv) the point of origin of the shipment and the estimated time and date that shipment will commence;

(v) the estimated time and date that the shipment is expected to enter each state along the route;

(vi) the estimated time and date of arrival of the shipment at the destination; and

(vii) a point of contact, with a telephone number, for current shipment information.

(C) Revision notice.

(i) The licensee shall provide any information not previously available at the time of the initial notification, as soon as the information becomes available but not later than commencement of the shipment, to the governor of the state or the governor's designee and to the Director, Texas Department of Public Safety, Office of Homeland Security, P.O. Box 4087, Austin, Texas 78773 or by fax to (512) 424-5708.

(ii) A licensee shall provide notice as follows of any changes to the information provided in accordance with subparagraphs (B) and (C)(i) of this paragraph.

(I) Promptly notify the governor of the state or the governor's designee.

(II) Immediately notify the Director, Texas Department of Public Safety, Office of Homeland Security, P.O. Box 4087, Austin, Texas 78773 or by fax to (512) 424-5708.

(D) Cancellation notice.

(i) Each licensee who cancels a shipment for which advance notification has been sent shall send a cancellation notice to:

(I) the governor of each state or to the governor's designee previously notified; and

(II) the Director, Texas Department of Public Safety, Office of Homeland Security, P.O. Box 4087, Austin, Texas 78773 or by fax to (512) 424-5708.

(ii) The licensee shall send the cancellation notice before the shipment would have commenced or as soon thereafter as possible.

(iii) The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being cancelled.

(E) Records. The licensee shall make, maintain, and retain a copy of the advance notification and any revision and cancellation notices as a record for inspection by the department [agency] in accordance with subsection (mm) of this section.

(F) Protection of information. State officials, state employees, and other individuals, whether or not licensees of the department [agency], the NRC, or any agreement state, who receive schedule information of the kind specified in subparagraph (B) of this paragraph shall protect that information against unauthorized disclosure as specified in paragraph (10)(D) of this subsection.

(22) Requirements for physical protection of category 1 or category 2 quantities of radioactive material during shipment.

(A) Shipments by road.

(i) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a category 1 quantity of radioactive material shall:

(I) ensure that movement control centers are established that maintain position information from a remote location. These control centers shall monitor shipments 24 hours a day, 7 days a week, and have the ability to communicate immediately, in an emergency, with the appropriate law enforcement agencies;

(II) ensure that redundant communications are established that allow the transport to contact the escort vehicle (when used) and movement control center at all times. Redundant communications may not be subject to the same interference factors as the primary communication;

(III) ensure that shipments are continuously and actively monitored by a telemetric position monitoring system or an alternative tracking system reporting to a movement control center. A movement control center shall provide positive confirmation of the location, status, and control over the shipment. The movement control center must be prepared to promptly implement preplanned procedures in response to deviations from the authorized route or a notification of actual, attempted, or suspicious activities related to the theft, loss, or diversion of a shipment. These procedures will include[; but not be limited to,] the identification of and contact information for the appropriate LLEA along the shipment route;

(IV) provide an individual to accompany the driver for those highway shipments with a driving time period greater than the maximum number of allowable hours of service in a 24-hour duty day as established by the Department of Transportation Federal Motor Carrier Safety Administration. The accompanying individual may be another driver; and

(V) develop written normal and contingency procedures to address:

(-a-) notifications to the communication center and law enforcement agencies;

(-b-) communication protocols, which must include a strategy for the use of authentication codes and duress codes and provisions for refueling or other stops, detours, and locations where communication is expected to be temporarily lost;

(-c-) loss of communications; and

(-d-) responses to an actual or attempted theft or diversion of a shipment.

(ii) Each licensee who makes arrangements for the shipment of category 1 quantities of radioactive material shall ensure that drivers, accompanying personnel, and movement control center personnel have access to the normal and contingency procedures.

(iii) Each licensee that transports category 2 quantities of radioactive material shall maintain constant control and/or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance.

(iv) Each licensee who delivers to a carrier for transport, in a single shipment, a category 2 quantity of radioactive material shall:

(I) use carriers that have established package tracking systems. An established package tracking system is a documented, proven, and reliable system routinely used to transport objects of value. In order for a package tracking system to maintain constant control and/or surveillance, the package tracking system must allow the shipper or transporter to identify when and where the package was last and when it should arrive at the next point of control;

(II) use carriers that maintain constant control and/or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance; and

(III) use carriers that have established tracking systems that require an authorized signature before [~~prior to~~] releasing the package for delivery or return.

(B) Shipments by rail.

(i) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a category 1 quantity of radioactive material shall:

(I) ensure that rail shipments are monitored by a telemetric position monitoring system or an alternative tracking system reporting to the licensee, third-party, or railroad communications center. The communications center shall provide positive confirmation of the location of the shipment and its status. The communications center shall implement preplanned procedures in response to deviations from the authorized route or to a notification of actual, attempted, or suspicious activities related to the theft or diversion of a shipment. These procedures will include[; but not be limited to,] the identification of and contact information for the appropriate LLEA along the shipment route; and

(II) ensure that periodic reports to the communications center are made at preset intervals.

(ii) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a category 2 quantity of radioactive material shall:

(I) use carriers that have established package tracking systems. An established package tracking system is a documented, proven, and reliable system routinely used to transport objects of value. In order for a package tracking system to maintain constant control and/or surveillance, the package tracking system must allow the shipper or transporter to identify when and where the package was last and when it should arrive at the next point of control;

(II) use carriers that maintain constant control and/or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance; and

(III) use carriers that have established tracking systems that require an authorized signature before ~~prior to~~ releasing the package for delivery or return.

(C) Investigations.

(i) Each licensee who makes arrangements for the shipment of category 1 quantities of radioactive material shall immediately conduct an investigation upon the discovery that a category 1 shipment is lost or missing.

(ii) Each licensee who makes arrangements for the shipment of category 2 quantities of radioactive material shall immediately conduct an investigation, in coordination with the receiving licensee, of any shipment that has not arrived by the designated no-later-than arrival time.

(23) Reporting of events during shipment.

(A) The shipping licensee shall notify the appropriate LLEA and shall notify the department [agency] at (512) 458-7460 within one hour of its determination that a shipment of category 1 quantities of radioactive material is lost or missing. The appropriate LLEA would be the law enforcement agency in the area of the shipment's last confirmed location. During the investigation required by paragraph (22)(C) of this subsection, the shipping licensee will provide agreed upon updates to the department [agency] on the status of the investigation.

(B) The shipping licensee shall notify the department [agency] at (512) 458-7460 within four [4] hours of its determination that a shipment of category 2 quantities of radioactive material is lost or missing. If, after 24 hours of its determination that the shipment is lost or missing, the radioactive material has not been located and secured, the licensee shall immediately notify the department [agency].

(C) The shipping licensee shall notify the designated LLEA along the shipment route as soon as possible upon discovery of any actual or attempted theft or diversion of a shipment or suspicious activities related to the theft or diversion of a shipment of a category 1 quantity of radioactive material. As soon as possible after notifying the LLEA, the licensee shall notify the department [agency] at (512) 458-7460 upon discovery of any actual or attempted theft or diversion of a shipment, or any suspicious activity related to the shipment of category 1 radioactive material.

(D) The shipping licensee shall notify the department [agency] at (512) 458-7460 as soon as possible upon discovery of any actual or attempted theft or diversion of a shipment, or any suspicious activity related to the shipment, of a category 2 quantity of radioactive material.

(E) The shipping licensee shall notify the department [agency] at (512) 458-7460 and the LLEA as soon as possible upon

recovery of any lost or missing category 1 quantities of radioactive material.

(F) The shipping licensee shall notify the department [agency] at (512) 458-7460 as soon as possible upon recovery of any lost or missing category 2 quantities of radioactive material.

(G) The initial telephonic notification required by subparagraphs (A) - (D) of this paragraph must be followed within a period of 30 days by a written report submitted to the department [agency]. A written report is not required for notifications on suspicious activities required by subparagraphs (C) and (D) of this paragraph. ~~In addition, the licensee shall provide one copy of the written report addressed to the Director, Office of Nuclear Material Safety and Safeguards, Division of Security Policy, Office of Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.~~ The report must set forth the following information:

(i) a description of the licensed material involved, including kind, quantity, and chemical and physical form;

(ii) a description of the circumstances under which the loss or theft occurred;

(iii) a statement of disposition, or probable disposition, of the licensed material involved;

(iv) actions that have been taken, or will be taken, to recover the material; and

(v) procedures or measures that have been, or will be, adopted to ensure against a recurrence of the loss or theft of licensed material.

(H) Subsequent to filing the written report, the licensee shall also report any additional substantive information on the loss or theft within 30 days after the licensee learns of such information.

(24) Form of records. Each record required by this subsection shall be legible throughout the retention period specified in the department's [agency's] rules. The record may be the original or a reproduced copy or a microform, provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, and specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

(25) Record retention. All records/documents referenced in this subsection shall be made and maintained by the licensee for inspection by the department [agency] in accordance with subsection (mm) of this section. If a retention period is not otherwise specified, these records must be retained until the department [agency] terminates the facility's license. All records related to this subsection may be destroyed upon department [agency] termination of the facility license.

(jj) Appendices.

(1) Subjects to be included in training courses:

(A) fundamentals of radiation safety:

(i) characteristics of radiation;

(ii) units of radiation dose (rem) and activity of radioactivity (curie);

(iii) significance of radiation dose;

(I) radiation protection standards; and

- (II) biological effects of radiation;
- (iv) levels of radiation from sources of radiation;
- (v) methods of controlling radiation dose;
 - (I) time;
 - (II) distance; and
 - (III) shielding;
- (vi) radiation safety practices, including prevention of contamination and methods of decontamination; and
- (vii) discussion of internal exposure pathways;
- (B) radiation detection instrumentation to be used:
 - (i) radiation survey instruments:
 - (I) operation;
 - (II) calibration; and
 - (III) limitations;
 - (ii) survey techniques; and
 - (iii) individual monitoring devices;
- (C) equipment to be used:
 - (i) handling equipment and remote handling tools;
 - (ii) sources of radiation;
 - (iii) storage, control, disposal, and transport of equipment and sources of radiation;
 - (iv) operation and control of equipment; and
 - (v) maintenance of equipment;
- (D) the requirements of pertinent federal and state regulations;
- (E) the licensee's written operating, safety, and emergency procedures; and
- (F) the licensee's record keeping procedures.

(2) Isotope quantities (for use in subsection (gg) of this section).

Figure: 25 TAC §289.252(jj)(2)
 [Figure: 25 TAC §289.252(jj)(2)]

(3) Criteria relating to use of financial tests and parent company guarantees for providing reasonable assurance of funds for decommissioning.

(A) Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on obtaining a parent company guarantee that funds will be available for decommissioning costs and on a demonstration that the parent company passes a financial test. This paragraph establishes criteria for passing the financial test and for obtaining the parent company guarantee.

(B) Financial test.

(i) To pass the financial test, the parent company shall meet the criteria of either subclause (I) or (II) of this clause.

(I) The parent company shall have:

(-a-) two of the following three ratios:

(-1-) a ratio of total liabilities to net worth less than 2.0;

(-2-) a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and

(-3-) a ratio of current assets to current liabilities greater than 1.5;

(-b-) net working capital and tangible net worth each at least six times the current decommissioning cost estimates for the total of all facilities or parts thereof (or prescribed amount if a certification is used);

(-c-) tangible net worth of at least \$10 million; and

(-d-) assets located in the United States amounting to at least 90 percent [90%] of total assets or at least six times the current decommissioning cost estimates for the total of all facilities or parts thereof (or prescribed amount if a certification is used.)

(II) The parent company shall have:

(-a-) a current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

(-b-) tangible net worth each at least six times the current decommissioning cost estimate for the total of all facilities or parts thereof (or prescribed amount if a certification is used);

(-c-) tangible net worth of at least \$10 million; and

(-d-) assets located in the United States amounting to at least 90 percent [90%] of total assets or at least six times the current decommissioning cost estimates for the total of all facilities or parts thereof (or prescribed amount if certification is used).

(ii) The parent company's independent certified public accountant shall have compared the data used by the parent company in the financial test, which is derived from the independently audited, year-end financial statements for the latest fiscal year, with the amounts in such financial statement. In connection with that procedure, the licensee shall inform the department [agency] within 90 days of any matters coming to the auditor's attention that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test.

(iii) After the initial financial test, the parent company shall repeat the passage of the test within 90 days after the close of each succeeding fiscal year.

(iv) If the parent company no longer meets the requirements of clause (i) of this subparagraph, the licensee shall send notice to the department [agency] of intent to establish alternate financial assurance as specified in the department's [agency's] regulations. The notice shall be sent by certified mail within 90 days after the end of the fiscal year for which the year-end [year end] financial data show that the parent company no longer meets the financial test requirements. The licensee shall provide alternate financial assurance within 120 days after the end of such fiscal year.

(C) Parent company guarantee. The terms of a parent company guarantee that an applicant or licensee obtains shall provide that:

(i) the parent company guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the licensee and the department [agency]. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the licensee and the department [agency], as evidenced by the return receipts;

(ii) if the licensee fails to provide alternate financial assurance as specified in the department's [agency's] rules within 90 days after receipt by the licensee and the department [agency] of a notice of cancellation of the parent company guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the licensee;

(iii) the parent company guarantee and financial test provisions shall remain in effect until the department [agency] has terminated the license; and

(iv) if a trust is established for decommissioning costs, the trustee and trust shall be acceptable to the department [agency]. An acceptable trustee includes an appropriate state or federal government agency or an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(4) Criteria relating to use of financial tests and self-guarantees [self guarantees] for providing reasonable assurance of funds for decommissioning.

(A) Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the company passes a financial test of subparagraph (B) of this paragraph. Subparagraph (B) of this paragraph establishes criteria for passing the financial test for the self-guarantee [self guarantee] and establishes the terms for a self-guarantee [self guarantee].

(B) Financial test.

(i) To pass the financial test, a company shall meet all of the following criteria:

(I) tangible net worth at least 10 times the total current decommissioning cost estimate for the total of all facilities or parts thereof (or the current amount required if certification is used for all decommissioning activities for which the company is responsible as self-guaranteeing [self guaranteeing] licensee and as parent-guarantor);

(II) assets located in the United States amounting to at least 90 percent [90%] of total assets or at least 10 times the total current decommissioning cost estimate (or the current amount required if certification is used for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor); and

(III) a current rating for its most recent bond issuance of AAA, AA, A as issued by Standard and Poor's, or Aaa, Aa, A as issued by Moody's.

(ii) To pass the financial test, a company shall meet all of the following additional criteria:

(I) the company shall have at least one class of equity securities registered under the Securities Exchange Act of 1934;

(II) the company's independent certified public accountant shall have compared the data used by the company in the financial test that is derived from the independently audited year-end financial statements, based on United States generally accepted accounting practices, for the latest fiscal year, with the amounts in such financial statement. In connection with that procedure, the licensee shall inform the department [agency] within 90 days of any matters coming to the auditor's attention that cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test; and

(III) after the initial financial test, the company shall repeat the passage of the test within 90 days after the close of each succeeding fiscal year.

(iii) If the licensee no longer meets the criteria of clause (i) of this subparagraph, the licensee shall send immediate notice to the department [agency] of its intent to establish alternate financial assurance as specified in the department's [agency's] rules within 120 days of such notice.

(C) Company self-guarantee [self guarantee]. The terms of a self-guarantee [self guarantee] that an applicant or licensee furnishes shall provide that:

(i) the company guarantee will remain in force unless the licensee sends notice of cancellation by certified mail to the department [agency]. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by the department [agency], as evidenced by the return receipt.

(ii) the licensee shall provide alternate financial assurance as specified in the department's [agency's] rules within 90 days following receipt by the department [agency] of a notice of cancellation of the guarantee;

(iii) the guarantee and financial test provisions shall remain in effect until the department [agency] has terminated the license or until another financial assurance method acceptable to the department [agency] has been put in effect by the licensee;

(iv) the licensee will promptly forward to the department [agency] and the licensee's independent auditor all reports covering the latest fiscal year filed by the licensee with the Securities and Exchange Commission in accordance with the requirements of the Securities and Exchange Act of 1934, §13;

(v) if, at any time, the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by either Standard and Poor's or Moody's, the licensee will provide notice in writing of such fact to the department [agency] within 20 days after publication of the change by the rating service. If the licensee's most recent bond issuance ceases to be rated in any category of A or above by both Standard and Poor's and Moody's, the licensee no longer meets the criteria of subparagraph (B)(i) of this paragraph; and

(vi) the applicant or licensee shall provide to the department [agency] a written guarantee (a written commitment by a corporate officer) that states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the department [agency], the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning.

(5) Criteria relating to use of financial tests and self-guarantees [self guarantees] for providing reasonable assurance of funds for decommissioning by commercial companies that have no outstanding rated bonds.

(A) Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the company passes the financial test of subparagraph (B) of this paragraph. The terms of the self-guarantee are in subparagraph (C) of this paragraph. This paragraph establishes criteria for passing the financial test for the self-guarantee and establishes the terms for a self-guarantee.

(B) Financial test.

(i) To pass the financial test a company shall meet the following criteria:

(I) tangible net worth greater than \$10 million, or at least 10 times the total current decommissioning cost estimate (or the current amount required if certification is used), whichever is greater, for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor;

(II) assets located in the United States amounting to at least 90 percent [90%] of total assets or at least 10 times the total current decommissioning cost estimate (or the current amount required if certification is used) for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor; and

(III) a ratio of cash flow divided by total liabilities greater than 0.15 and a ratio of total liabilities divided by net worth less than 1.5.

(ii) In addition, to pass the financial test, a company shall meet all of the following requirements:

(I) the company's independent certified public accountant shall have compared the data used by the company in the financial test, that is required to be derived from the independently audited year-end [year end] financial statement based on United States generally accepted accounting practices for the latest fiscal year, with the amounts in the financial statement. In connection with that procedure, the licensee shall inform the department [agency] within 90 days of any matters that may cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test;

(II) after the initial financial test, the company shall repeat passage of the test within 90 days after the close of each succeeding fiscal year; and

(III) if the licensee no longer meets the requirements of subparagraph (B)(i) of this paragraph, the licensee shall send notice to the department [agency] of its intent to establish alternative financial assurance as specified in the department's [agency's] rules. The notice shall be sent by certified mail, return receipt requested, within 90 days after the end of the fiscal year for which the year-end [year end] financial data show that the licensee no longer meets the financial test requirements. The licensee shall provide alternative financial assurance within 120 days after the end of such fiscal year.

(C) Company self-guarantee. The terms of a self-guarantee that an applicant or licensee furnishes shall provide the following.

(i) The guarantee shall remain in force unless the licensee sends notice of cancellation by certified mail, return receipt requested, to the department [agency]. Cancellation may not occur until an alternative financial assurance mechanism is in place.

(ii) The licensee shall provide alternative financial assurance as specified in the department's [agency] rules within 90 days following receipt by the department [agency] of a notice of cancellation of the guarantee.

(iii) The guarantee and financial test provisions shall remain in effect until the department [agency] has terminated the license or until another financial assurance method acceptable to the department [agency] has been put in effect by the licensee.

(iv) The applicant or licensee shall provide to the department [agency] a written guarantee (a written commitment by a corporate officer) that states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the department [agency], the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning.

(6) Criteria relating to use of financial tests and self-guarantees for providing reasonable assurance of funds for decommissioning by nonprofit entities, such as colleges, universities, and nonprofit hospitals.

(A) Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the applicant or licensee passes the financial test of subparagraph (B) of this paragraph. The terms of the self-guarantee are in subparagraph (C) of this paragraph. This paragraph establishes criteria for passing the financial test for the self-guarantee and establishes the terms for a self-guarantee.

(B) Financial test.

(i) To pass the financial test, a college or university shall meet the criteria of subclause (I) or (II) of this clause. The college or university shall meet one of the following:

(I) for applicants or licensees that issue bonds, a current rating for its most recent uninsured, uncollateralized, and unencumbered bond issuance of AAA, AA, or A as issued by Standard and Poor's or Aaa, Aa, or A as issued by Moody's; or

(II) for applicants or licensees that do not issue bonds, unrestricted endowment consisting of assets located in the United States of at least \$50 million, or at least 30 times the total current decommissioning cost estimate (or the current amount required if certification is used), whichever is greater, for all decommissioning activities for which the college or university is responsible as a self-guaranteeing licensee.

(ii) To pass the financial test, a hospital shall meet the criteria in subclause (I) or (II) of this clause. The hospital shall meet one of the following:

(I) for applicants or licensees that issue bonds, a current rating for its most recent uninsured, uncollateralized, and unencumbered bond issuance of AAA, AA, or A as issued by Standard and Poor's or Aaa, Aa, or A as issued by Moody's; or

(II) for applicants or licensees that do not issue bonds, all the following tests shall be met:

(-a-) (total revenues less total expenditures) divided by total revenues shall be equal to or greater than 0.04;

(-b-) long term debt divided by net fixed assets shall be less than or equal to 0.67;

(-c-) (current assets and depreciation fund) divided by current liabilities shall be greater than or equal to 2.55; and

(-d-) operating revenues shall be at least 100 times the total current decommissioning cost estimate (or the current amount required if certification is used) for all decommissioning activities for which the hospital is responsible as a self-guaranteeing licensee.

(iii) In addition, to pass the financial test, a licensee shall meet all the following requirements:

(I) the licensee's independent certified public accountant shall have compared the data used by the licensee in the financial test that is required to be derived from the independently audited year-end financial statements, based on United States generally accepted accounting practices, for the latest fiscal year, with the amounts in the financial statement. In connection with that procedure, the licensee shall inform the department [agency] within 90 days of any matters coming to the attention of the auditor that cause the auditor to believe that the data specified in the financial test should be adjusted and that the licensee no longer passes the test; and

(II) after the initial financial test, the licensee shall repeat passage of the test within 90 days after the close of each succeeding fiscal year;

(III) if the licensee no longer meets the requirements of subparagraph (A) of this paragraph, the licensee shall send notice to the department [agency] of its intent to establish alternative financial assurance as specified in the department's [agency's] rules. The notice shall be sent by certified mail, return receipt requested, within 90 days after the end of the fiscal year for which the year-end [year end] financial data show that the licensee no longer meets the financial test requirements. The licensee shall provide alternate financial assurance within 120 days after the end of such fiscal year.

(C) Self-guarantee. The terms of a self-guarantee that an applicant or licensee furnishes shall provide the following:

(i) The guarantee shall remain in force unless the licensee sends notice of cancellation by certified mail, [and/or] return receipt requested, to the department [agency]. Cancellation may not occur unless an alternative financial assurance mechanism is in place.

(ii) The licensee shall provide alternative financial assurance as specified in the department's [agency's] regulations within 90 days following receipt by the department [agency] of a notice of cancellation of the guarantee.

(iii) The guarantee and financial test provisions shall remain in effect until the department [agency] has terminated the license or until another financial assurance method acceptable to the department [agency] has been put in effect by the licensee.

(iv) The applicant or licensee shall provide to the department [agency] a written guarantee (a written commitment by a corporate officer or officer of the institution) that states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the department [agency], the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning.

(v) If, at any time, the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by either Standard and Poor's or Moody's, the licensee shall provide notice in writing of the fact to the department [agency] within 20 days after publication of the change by the rating service.

(7) Quantities of radioactive materials requiring consideration of the need for an emergency plan for responding to a release. The following table contains quantities of radioactive materials requiring consideration of the need for an emergency plan for responding to a release.

Figure: 25 TAC §289.252(jj)(7) (No change.)

(8) Requirements for demonstrating financial qualifications.

(A) If an applicant or licensee is not required to submit financial assurance in accordance with subsection (gg) of this section, that applicant or licensee shall demonstrate financial qualification by submitting attestation that the applicant or licensee is financially qualified to conduct the activity requested for licensure, including any required decontamination, decommissioning, reclamation, and disposal before the department [agency] issues a license.

(B) If an applicant or licensee is required to submit financial assurance in accordance with subsection (gg) of this section, that applicant or licensee shall:

(i) submit one of the following:

(I) the bonding company report or equivalent (from which information can be obtained to calculate a ratio in clause (ii) of this subparagraph) that was used to obtain the financial assurance instrument used to meet the financial assurance requirement specified in subsection (gg) of this section. However, if the applicant or licensee posted collateral to obtain the financial instrument used to meet the requirement for financial assurance specified in subsection (gg) of this section, the applicant or licensee shall demonstrate financial qualification by one of the methods specified in subclause (II) or (III) of this clause;

(II) Securities and Exchange Commission documentation (from which information can be obtained to calculate a ratio as described in clause (ii) of this subparagraph, if the applicant or licensee is a publicly-held company); or

(III) a self-test (for example, an annual audit report certifying a company's assets and liabilities and resulting ratio as described in clause (ii) of this subparagraph or, in the case of a new company, a business plan specifying expected expenses versus capitalization and anticipated revenues); and

(ii) declare its Standard Industry Classification (SIC) code. Several companies publish lists, on an annual basis, of acceptable assets-to liabilities (assets divided by liabilities) ratio ranges for each type of SIC code. If an applicant or licensee submits documentation of its current assets and current liabilities or, in the case of a new company, a business plan specifying expected expenses versus capitalization and anticipated revenues, and the resulting ratio falls within an acceptable range as published by generally recognized companies (for example, Almanac of Business and Industrial Financial Ratios, Industry NORM and Key Business Ratios, Dun & Bradstreet Industry publications, and Manufacturing USA: Industry Analyses, Statistics, and Leading Companies), the department [agency] will consider that applicant or licensee financially qualified to conduct the requested or licensed activity.

(C) If the applicant or licensee is a state or local government entity, a statement of such will suffice as demonstration that the government entity is financially qualified to conduct the requested or licensed activities.

(D) The department [agency] will consider other types of documentation if that documentation provides an equivalent measure of assurance of the applicant's or licensee's financial qualifications as found in subparagraphs (A) and (B) of this paragraph.

(9) Category 1 and category 2 radioactive materials. Licensees shall use Figure: 25 TAC §289.252(jj)(9) to determine whether a quantity of radioactive material constitutes a Category 1 or Category 2 quantity of radioactive material.

Figure: 25 TAC §289.252(jj)(9) (No change.)

(10) Broad scope license limits (for use in subsection (h) of this section).

Figure: 25 TAC §289.252(jj)(10)

(kk) Requirements for the issuance of specific licenses for a medical facility or educational institution to produce Positron Emission Tomography (PET) radioactive drugs for noncommercial transfer to licensees in its consortium.

(l) A license application will be approved if the department [agency] determines that an application from a medical facility or educational institution to produce PET radioactive drugs for noncommercial transfer to licensees in its consortium authorized for medical use in accordance with §289.256 of this title includes:

(A) a request for authorization for the production of PET radionuclides or evidence of an existing license issued in accordance with this section, the NRC, or another agreement states requirements for a PET radionuclide production facility within its consortium from which it receives PET radionuclides;

(B) evidence that the applicant is qualified to produce radioactive drugs for medical use by meeting one of the criteria in subsection (r)(1)(A) of this section;

(C) identification of individual(s) authorized to prepare the PET radioactive drugs if the applicant is a pharmacy, and documentation that each individual meets the requirements of an authorized nuclear pharmacist as specified in subsection (r)(3)(B) of this section; and

(D) information identified in subsection (r)(1)(B) of this section on the PET drugs to be noncommercially transferred to members of its consortium.

(2) Authorization in accordance with paragraph (1) of this subsection to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium does not relieve the licensee from complying with applicable FDA, other federal, and state requirements governing radioactive drugs.

(3) Each licensee authorized in accordance with paragraph (1) of this subsection to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium shall:

(A) satisfy the labeling requirements in subsection (r)(1)(C) of this section for each PET radioactive drug transport radiation shield and each syringe, vial, or other container used to hold a PET radioactive drug intended for noncommercial distribution to members of its consortium; and

(B) possess and use instrumentation meeting the requirements of §289.202(p)(3)(D) of this title to measure the radioactivity of the PET radioactive drugs intended for noncommercial distribution to members of its consortium and meet the procedural, radioactivity measurement, instrument test, instrument check, and instrument adjustment requirements in subsection (r)(2) of this section.

(4) A licensee that is a pharmacy authorized in accordance with paragraph (1) of this subsection to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium shall require that any individual that prepares PET radioactive drugs shall be:

(A) an authorized nuclear pharmacist that meets the requirements in subsection (r)(3)(B) of this section; or

(B) an individual under the supervision of an authorized nuclear pharmacist as specified in §289.256(s) of this title.

(5) A pharmacy, authorized in accordance with paragraph (1) of this subsection to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium that allows an individual to work as an authorized nuclear pharmacist, shall meet the requirements of subsection (r)(3)(E) of this section.

(II) Specific licenses for installation, repair, or maintenance of devices containing sealed sources of radioactive material.

(1) In addition to the requirements in subsection (e) of this section, a specific license authorizing persons to perform installation, repair, or maintenance of devices containing sealed source(s) including source exchanges will be issued if the department [agency] approves the information submitted by the applicant.

(2) Each installation, repair, or maintenance activity shall be documented and a record maintained for inspection by the

department [agency] in accordance with subsection (mm) of this section. The record shall include the date, description of the service, initial survey results, and name(s) of the individual(s) who performed the work.

(3) Installation, repair, maintenance, or source exchange activities shall be performed by a specifically licensed person unless otherwise authorized in accordance with subsection (v) of this section.

(mm) Records/documents retention. Each licensee shall make, maintain, and retain at each authorized use site and for the time period set forth in the table, the records/documents described in the following table and in the referenced rule provision, and shall make them available to the department [agency] for inspection, upon reasonable notice.

Figure: 25 TAC §289.252(mm)

[Figure: 25 TAC §289.252(mm)]

§289.256. *Medical and Veterinary Use of Radioactive Material.*

(a) Purpose.

(1) This section establishes requirements for the medical and veterinary use of radioactive material and for the issuance of specific licenses authorizing the medical and veterinary use of radioactive material. Unless otherwise exempted, no person shall manufacture, produce, receive, possess, use, transfer, own, or acquire radioactive material for medical or veterinary use except as authorized in a license issued in accordance with this section.

(2) A person who manufactures, produces, receives, possesses, uses, transfers, owns, or acquires radioactive material prior to receiving a license is subject to the requirements of this chapter.

(3) A specific license is not needed for a person who:

(A) receives, possesses, uses, or transfers radioactive material in accordance with the regulations in this chapter under the supervision of an authorized user as provided in subsection (s) of this section, unless prohibited by license condition; or

(B) prepares unsealed radioactive material for medical use in accordance with the regulations in this chapter under the supervision of an authorized nuclear pharmacist or authorized user as provided in subsection (s) of this section, unless prohibited by license condition.

(b) Scope.

(1) In addition to the requirements of this section, all licensees, unless otherwise specified, are subject to the requirements of §289.201 of this title (relating to General Provisions for Radioactive Material), §289.202 of this title (relating to Standards for Protection Against Radiation from Radioactive Materials), §289.203 of this title (relating to Notices, Instructions, and Reports to Workers; Inspections), §289.204 of this title (relating to Fees for Certificates of Registration, Radioactive Material Licenses, Emergency Planning and Implementation, and Other Regulatory Services), §289.205 of this title (relating to Hearing and Enforcement Procedures), §289.252 of this title (relating to Licensing of Radioactive Material), and §289.257 of this title (relating to Packaging and Transportation of Radioactive Material).

(2) Veterinarians who receive, possess, use, transfer, own, or acquire radioactive material in the practice of veterinary medicine shall comply with the requirements of this section except for subsections (d), (dd) and (uuu) of this section.

(3) An entity that is a "covered entity" as that term is defined in HIPAA (the Health Insurance Portability and Accountability Act of 1996, Title 45, Code of Federal Regulations (CFR), Parts 160 and 164) may be subject to privacy standards governing how information that identifies a patient can be used and disclosed. Failure to follow

HIPAA requirements may result in the department making a referral of a potential violation to the United States Department of Health and Human Services.

(4) In accordance with the requirements of the Texas Medical Board, Title 22, Texas Administrative Code (TAC), Chapter 160, medical licensees must use the services of a licensed medical physicist for activities falling within the medical physicist scope of practice as identified in 22 TAC §160.17 unless exempted under 22 TAC §160.5.

(c) Definitions. The following words and terms when used in this section shall have the following meaning unless the context clearly indicates otherwise.

(1) Address of use--The building or buildings that are identified on the license and where radioactive material may be prepared, received, used, or stored.

(2) Area of use--A portion of an address of use that has been set aside for the purpose of preparing, receiving, using, or storing radioactive material.

(3) Associate radiation safety officer (ARSO)--An individual who:

(A) meets the requirements in subsections (h) and (m) of this section; and

(B) is currently identified as an ARSO for the types of use of radioactive material for which the individual has been assigned duties and tasks by the radiation safety officer (RSO) on:

(i) a specific medical use license issued by the department, the United States Nuclear Regulatory Commission (NRC), or an agreement state; or

(ii) a medical use permit issued by an NRC master material licensee.

(4) [(3)] Authorized medical physicist--An individual who meets the following:

(A) the requirements in subsections (j) and (m) of this section; or

(B) is identified as an authorized medical physicist or teletherapy physicist on one of the following:

(i) a specific medical use license issued by the department [agency], the NRC [United States Nuclear Regulatory Commission (NRC)], or an agreement state;

(ii) a medical use permit issued by an NRC master material licensee;

(iii) a permit issued by an NRC, or agreement state broad scope medical use licensee; or

(iv) a permit issued by an NRC master material license broad scope medical use permittee; and

(C) holds a current Texas license under the Medical Physics Practice Act, Texas Occupations Code, Chapter 602, in therapeutic radiological physics for uses in subsections (rr) and (ddd) of this section.

(5) [(4)] Authorized nuclear pharmacist--A pharmacist who meets the following:

(A) the requirements in subsections (k) and (m) of this section; or

(B) is identified as an authorized nuclear pharmacist on one of the following:

(i) a specific license issued by the department [agency], the NRC, or an agreement state that authorizes medical use or the practice of nuclear pharmacy;

(ii) a permit issued by an NRC master material licensee that authorizes medical use or the practice of nuclear pharmacy;

(iii) a permit issued by the department [agency], the NRC, or an agreement state licensee of [with] broad scope [authorization] that authorizes medical use or the practice of nuclear pharmacy; or

(iv) a permit issued by an NRC master material license broad scope medical use permittee that authorizes medical use or the practice of nuclear pharmacy; or

(C) is identified as an authorized nuclear pharmacist by a commercial nuclear pharmacy that has been authorized to identify authorized nuclear pharmacists; or

(D) is designated as an authorized nuclear pharmacist in accordance with §289.252(r) of this title; and

(E) holds a current Texas license under the Texas Pharmacy Act, Texas Occupations Code, Chapters 551 - 566, 568, and 569, as amended, and who is certified as an authorized nuclear pharmacist by the Texas State Board of Pharmacy.

(6) [(5)] Authorized user--An authorized user is defined as follows:

(A) for human use, a physician licensed by the Texas Medical Board; or a dentist licensed by the Texas State Board of Dental Examiners; or a podiatrist licensed by the Texas State Board of Podiatric Medicine who:

(i) meets the requirements in subsection [subsections] (m) and subsections [s] (gg), (jj), (nn), (oo), (pp), (qq), (zz), (aaa), (ccc) or (ttt) of this section; or

(ii) is identified as an authorized user on any of the following:

(I) an agency, NRC, or agreement state license that authorizes the medical use of radioactive material;

(II) a permit issued by an NRC master material licensee that is authorized to permit the medical use of radioactive material;

(III) a permit issued by a specific licensee of [with] broad scope [authorization] issued by the department [agency], the NRC, or an agreement state authorizing the medical use of radioactive material; or

(IV) a permit issued by an NRC master material licensee of [with] broad scope [authorization] that is authorized to permit the medical use of radioactive material.

(B) for veterinary use, an individual who is, a veterinarian licensed by the Texas State Board of Veterinary Medical Examiners; and

(i) is certified by the American College of Veterinary Radiology for the use of radioactive materials in veterinary medicine; or

(ii) has received training in accordance with subsections (gg), (jj), (nn) - (qq), (zz), (aaa), (ccc), and (ttt) of this section as applicable; or

(iii) is identified as an authorized user on any of the following:

(I) an agency, NRC, or agreement state license that authorizes the veterinary use of radioactive material;

(II) a permit issued by an NRC master material licensee that is authorized to permit the medical use of radioactive material;

(III) a permit issued by a specific licensee of [with] broad scope [authorization] issued by the department [agency], the NRC, or an agreement state authorizing the medical or veterinary use of radioactive material; or

(IV) a permit issued by an NRC master material licensee of [with] broad scope [authorization] that authorizes the medical use of radioactive material.

(7) [(6)] Brachytherapy--A method of radiation therapy in which plated, embedded, activated, or sealed sources are utilized to deliver a radiation dose at a distance of up to a few centimeters, by surface, intracavitary, intraluminal, or interstitial application.

(8) [(7)] Brachytherapy sealed source--A sealed source or a manufacturer-assembled source train, or a combination of these sources that is designed to deliver a therapeutic dose within a distance of a few centimeters.

(9) [(8)] High dose-rate remote afterloader--A device that remotely delivers a dose rate in excess of 1200 rads (12 Gy) per hour at the point or surface where the dose is prescribed.

(10) [(9)] Institutional Review Board (IRB)--Any board, committee, or other group formally designated by an institution and approved by the United States Food and Drug Administration (FDA) to review, approve the initiation of, and conduct periodic review of biomedical research involving human subjects.

(11) [(10)] Low dose-rate remote afterloader--A device that remotely delivers a dose rate of less than or equal to 200 rads (2 Gy) per hour at the point or surface where the dose is prescribed.

(12) [(11)] Management--The chief executive officer or other individual delegated the authority to manage, direct, or administer the licensee's activities.

(13) [(12)] Manual brachytherapy--A type of brachytherapy in which the sealed sources, for example, seeds and ribbons, are manually inserted either into the body cavities that are in close proximity to a treatment site or directly in the tissue volume.

(14) [(13)] Medical event--An event that meets the criteria in subsection (uuu)(1) of this section.

(15) [(14)] Medical institution--An organization in which several medical disciplines are practiced.

(16) [(15)] Medical use--The intentional internal or external administration of radioactive material, or the radiation from radioactive material, to patients or human research subjects under the supervision of an authorized user.

(17) [(16)] Medium dose-rate afterloader--A device that remotely delivers a dose rate greater than 200 rads (2 Gy) and less than or equal to 1200 rads (12 Gy) per hour at the point or surface where the dose is prescribed.

(18) [(17)] Mobile nuclear medicine service--A licensed service authorized to transport radioactive material to, and medical use of the material at, the client's address. Services transporting calibration sources only are not considered mobile nuclear medicine licensees.

(19) Ophthalmic physicist--An individual who:

(A) meets the requirements in subsections (m) and (xx)(1)(B) of this section; and

(B) is identified as an ophthalmic physicist on:

(i) a specific medical use license issued by the department, the NRC, or an agreement state;

(ii) a permit issued by an agency, NRC, or agreement state broad scope medical use licensee;

(iii) a medical use permit issued by an NRC master material licensee; or

(iv) a permit issued by an NRC master material licensee broad scope medical use permittee.

(20) [(18)] Output--The exposure rate, dose rate, or a quantity related in a known manner to these rates from a teletherapy unit, a brachytherapy source, a remote afterloader unit, or a gamma stereotactic radiosurgery unit, for a specified set of exposure conditions.

(21) [(19)] Patient--A human or animal under medical care and treatment.

(22) Patient intervention--Actions by the patient or human research subject, whether intentional or unintentional, such as dislodging or removing treatment devices or prematurely terminating the administration.

(23) [(20)] Permanent facility--A building or buildings that are identified on the license within the State of Texas and where radioactive material may be prepared, received, used, or stored. This may also include an area or areas where administrative activities related to the license are performed.

(24) [(21)] Preceptor--An individual who provides, directs, or verifies the training and experience required for an individual to become an authorized user, an authorized medical physicist, an authorized nuclear pharmacist, an RSO, or an ARSO [or a radiation safety officer].

(25) [(22)] Prescribed dosage--The specified activity or range of activity of unsealed radioactive material as documented in a written directive or in accordance with the directions of the authorized user for procedures in subsections (ff) and (hh) of this section.

(26) [(23)] Prescribed dose--Prescribed dose means one of the following:

(A) for gamma stereotactic radiosurgery, the total dose as documented in the written directive;

(B) for teletherapy, the total dose and dose per fraction as documented in the written directive;

(C) for brachytherapy, either the total sealed source strength and exposure time, or the total dose, as documented in the written directive; or

(D) for remote afterloaders, the total dose and dose per fraction as documented in the written directive.

(27) [(24)] Pulsed dose-rate remote afterloader--A special type of remote afterloading device that uses a single sealed source capable of delivering dose rates greater than 1200 rads (12 Gy) per hour, but is approximately one-tenth of the activity of typical high dose-rate remote afterloader sealed sources and is used to simulate the radiobiology of a low dose rate remote afterloader treatment by inserting the sealed source for a given fraction of each hour.

(28) [(25)] Radiation safety officer (RSO)--For purposes of this section, an individual who:

(A) meets the requirements in subsections (h) and (m) of this section; or

(B) is identified as an RSO on one of the following:

(i) a specific license issued by the department [agency], the NRC, or an agreement state that authorizes the medical or veterinary use of radioactive material; or

(ii) a permit issued by an NRC master material licensee that authorizes the medical or veterinary use of radioactive material.

(29) [(26)] Sealed source and device registry--The national registry that contains all the registration certificates, generated by both the NRC and the agreement states, that summarize the radiation safety information for sealed sources and devices and describe the licensing and use conditions approved for the product.

(30) [(27)] Stereotactic radiosurgery--The use of external radiation in conjunction with a guidance device to very precisely deliver a dose to a tissue volume by the use of three-dimensional coordinates.

(31) [(28)] Technologist--[Technologist is defined as either of the following:]

[(A)] [in nuclear medicine, a] A person (nuclear medicine technologist) skilled in the performance of nuclear medicine procedures under the supervision of a physician. [; or]

[(B) in therapy, as described in subsections (ff) and (ddd) of this section, a person (radiation therapy technologist or radiation therapist) who delivers treatments of radiation therapy under the supervision of and as prescribed by an authorized user who meets the requirements of subsections (zz) or (ttt) of this section.]

(32) [(29)] Teletherapy--Therapeutic irradiation in which the sealed source is at a distance from the patient or human or animal research subject.

(33) [(30)] Therapeutic dosage--The specified activity or range of activity of radioactive material that is intended to deliver a radiation dose to a patient or human or animal research subject for palliative or curative treatment.

(34) [(31)] Therapeutic dose--A radiation dose delivered from a sealed source containing radioactive material to a patient or human or animal research subject for palliative or curative treatment.

(35) [(32)] Treatment site--The anatomical description of the tissue intended to receive a radiation dose, as described in a written directive.

(36) [(33)] Type of use--Use of radioactive material as specified under the following subsections:

(A) uptake, [and] dilution, and excretion studies in subsection (ff) of this section;

(B) imaging and localization studies in subsection (hh) of this section;

(C) therapy with unsealed radioactive material in subsection (kk) of this section;

(D) manual brachytherapy with sealed sources in subsection (rr) of this section;

(E) sealed sources for diagnosis in subsection (bbb) of this section; [and]

(F) sealed source in a remote afterloader unit, teletherapy unit, or gamma stereotactic radiosurgery unit in subsection (ddd) of this section; or[.]

(G) other medical or veterinary uses of radioactive material or a radiation source approved for medical or veterinary use in subsection (q) of this section.

(37) [(34)] Unit dosage--A dosage prepared for medical use for administration as a single dosage to a patient or human or animal research subject without any further modification of the dosage after it is initially prepared.

(38) [(35)] Veterinary use--The intentional internal or external administration of radioactive material, or the radiation from radioactive material, to patients under the supervision of an authorized user.

(39) [(36)] Written directive--An authorized user's written order for the administration of radioactive material or radiation from radioactive material to a specific patient or human research subject, as specified in subsection (t) of this section.

(d) Provisions for research involving human subjects.

(1) A licensee may conduct research involving human subjects only if it uses the radioactive materials specified on its license for the uses authorized on the license.

(2) The licensee may conduct research specified in paragraph (1) of this subsection provided that:

(A) the research is conducted, funded, supported, or regulated by a federal agency that has implemented the Federal Policy for the Protection of Human Subjects as required by Title 10, CFR [Code of Federal Regulations (CFR)], §35.6 (Federal Policy); or

(B) the licensee has applied for and received approval of a specific amendment to its license before conducting the research.

(3) Before [Prior to] conducting research as specified in paragraph (1) of this subsection, the licensee shall obtain the following:

(A) "informed consent," as defined and described in the Federal Policy, from the human research subjects; and

(B) review and approval of the research from an IRB as required by Title 45, CFR, Part 46, and Title 21, CFR, Part 56, and in accordance with the Federal Policy.

(4) Nothing in this subsection relieves licensees from complying with the other requirements of this chapter.

(e) Implementation.

(1) If a license condition exempted a licensee from a provision of this section or §289.252 of this title on the effective date of this rule, then the license condition continues to exempt the licensee from the requirements in the corresponding provision until there is a license amendment or license renewal that modifies or removes the license condition.

(2) When a requirement in this section differs from the requirement in an existing license condition, the requirement in this section shall govern.

(3) Licensees shall continue to comply with any license condition that requires implementation of procedures required by subsections (ggg) and (mmm) - (ooo) of this section until there is a license amendment or renewal that modifies the license condition.

(f) Specific requirements for the issuance of licenses. In addition to the requirements in §289.252(e) of this title and subsections

(n) - (q) of this section, as applicable, a license will be issued if the department [agency] determines that:

(1) the applicant satisfies any applicable special requirement in this section;

(2) qualifications of the designated [radiation safety officer (RSO)] as specified in subsection (h) of this section are adequate for the purpose requested in the application; and

(3) the following information submitted by the applicant is approved:

(A) an operating, safety, and emergency procedures manual to include specific information on the following:

(i) radiation safety precautions and instructions;

(ii) methodology for measurement of dosages or doses to be administered to patients or human or animal research subjects;

(iii) calibration, maintenance, and repair of instruments and equipment necessary for radiation safety; and

(iv) waste disposal procedures; and

(B) any additional information required by this chapter that is requested by the department [agency] to assist in its review of the application; and

(C) qualifications of the following:

(i) RSO in accordance with subsection (c)(28) [(h)] of this section;

(ii) authorized user(s) in accordance with subsection (c)(6) [(e)(5)] of this section as applicable to the use(s) being requested;

(iii) authorized medical physicist in accordance with subsection (c)(4) [(e)(3)] of this section, if applicable;

(iv) authorized nuclear pharmacist in accordance with subsection (c)(5) [(e)(4)] of this section, if applicable; [and]

(v) ophthalmic physicist in accordance with subsection (c)(19), if applicable;

(vi) [(v)] Radiation Safety Committee [radiation safety committee] (RSC), in accordance with subsection (i) of this section, if applicable; and

(vii) ARSO in accordance with subsection (c)(3) of this section, if applicable; and

(4) the applicant's permanent facility is located in Texas. [; and]

[(5) the owner of the property is aware that radioactive material is stored and/or used on the property; if the proposed facility is not owned by the applicant. The applicant shall provide a written statement from the owner or the owner's agent indicating such.]

(g) Authority and responsibilities for the radiation protection program [Radiation safety officer].

(1) In addition to the radiation protection program requirements of §289.202(e) of this title, a licensee's management shall approve in writing:

(A) requests for a license application, renewal, or amendment before submittal to the department; and

(B) any individual before allowing that individual to work as an authorized user, authorized nuclear pharmacist, or authorized medical physicist.

(2) A licensee's management shall appoint an RSO who agrees, in writing, to be responsible for implementing the radiation protection program. The licensee, through the RSO, shall ensure that radiation safety activities are being performed in accordance with licensee-approved procedures and regulatory requirements. A licensee's management may appoint, in writing, one or more ARSO to support the RSO. The RSO, with written agreement of the licensee's management, must assign the specific duties and tasks to each ARSO. These duties and tasks are restricted to the types of use for which the ARSO is listed on a license. The RSO may delegate duties and tasks to the ARSO but shall not delegate the authority or responsibilities for implementing the radiation protection program.

(3) [(+) Every licensee shall establish in writing the authority, duties, and responsibilities of the RSO and ensure that the RSO is provided sufficient authority, organizational freedom, time, resources, and management prerogative to perform the following duties:

(A) establish and oversee operating, safety, emergency, and as low as reasonably achievable (ALARA) procedures, and to review them at least annually to ensure that the procedures are current and conform with this chapter;

(B) ensure that required radiation surveys and leak tests are performed and documented in accordance with this chapter, including any corrective measures when levels of radiation exceed established limits;

(C) ensure that individual monitoring devices are used properly by occupationally-exposed personnel, that records are kept of the monitoring results, and that timely notifications are made in accordance with §289.203 of this title;

(D) investigate and cause a report to be submitted to the department [agency] for each known or suspected case of radiation exposure to an individual or radiation level detected in excess of limits established by this chapter and each theft or loss of source(s) of radiation, to determine the cause(s), and to take steps to prevent a recurrence;

(E) investigate and cause a report to be submitted to the department [agency] for each known or suspected case of release of radioactive material to the environment in excess of limits established by this chapter;

(F) have a thorough knowledge of management policies and administrative procedures of the licensee;

(G) identify radiation safety problems;

(H) assume control and initiate, recommend, or provide corrective actions, including shutdown of operations when necessary, in emergency situations or unsafe conditions;

(I) verify implementation of corrective actions;

(J) ensure that records are maintained as required by this chapter;

(K) ensure the proper storing, labeling, transport, use, and disposal of sources of radiation, storage, and/or transport containers;

(L) ensure that inventories are performed in accordance with the activities for which the license application is submitted;

(M) ensure that personnel are complying with this chapter, the conditions of the license, and the operating, safety, and emergency procedures of the licensee; and

(N) serve as the primary contact with the department [agency].

(4) ~~[(2)]~~ The RSO shall ensure that the duties listed in paragraph (3)(A) - (N) ~~[(4)(A) - (N)]~~ of this subsection are performed.

(5) ~~[(3)]~~ The RSO shall be on site periodically commensurate with the scope of licensed activities to satisfy the requirements of paragraphs (3) ~~[(4)]~~ and (4) ~~[(2)]~~ of this subsection.

(6) ~~[(4)]~~ The RSO, or staff designated by the RSO, shall be capable of physically arriving at the licensee's authorized use site(s) within a reasonable time of being notified of an emergency situation or unsafe condition.

(7) ~~[(5)]~~ For up to 60 days each calendar year, a licensee may permit an authorized user or an individual qualified to be an RSO₂ under subsections (h) and (m) of this section, to function as a temporary RSO and to perform the duties of an RSO in accordance with paragraph (3) ~~[(4)]~~ of this subsection, provided the licensee takes the actions required in paragraphs (2), (3), and (9) ~~[paragraph (4)]~~ of this subsection, and notifies the department in accordance with subsection (r)(5) ~~[and the RSO meets the qualifications in subsection (h)]~~ of this section. Records of qualifications and dates of service shall be maintained in accordance with subsection (xxx) ~~[(www)]~~ of this section for inspection by the department ~~[agency].~~

(8) A licensee may simultaneously appoint more than one temporary RSO in accordance with paragraph (7) of this subsection, if needed to ensure that the licensee has a temporary RSO that satisfies the requirements to be an RSO for each of the different types of uses of radioactive material permitted by the license.

(9) The licensee shall maintain records, in accordance with subsection (xxx) of this section, as follows.

(A) A licensee shall retain a record of actions taken by the licensee's management in accordance with paragraph (1) of this subsection. The record must include a summary of the actions taken and a signature of licensee management.

(B) The authority, duties, and responsibilities of the RSO as required by paragraph (3) of this subsection, and a signed copy of each RSO's agreement to be responsible for implementing the radiation safety program, as required by paragraph (2) of this subsection. The records must include the signature of the RSO and licensee management.

(C) A copy of the written document appointing the ARSO, for each ARSO appointed under paragraph (2) of this subsection. The record must include the signature of licensee management.

(h) Training for an RSO and ARSO ~~[radiation safety officer]~~. Except as provided in subsection (l) of this section, the licensee shall require the individual fulfilling the responsibilities of an RSO or an individual assigned duties and tasks as an ARSO in accordance with subsection (g) of this section for licenses for medical or veterinary use of radioactive material to be an individual who:

(1) is certified by a specialty board whose certification process has been recognized by the department ~~[agency]~~, the NRC, or an agreement state and who meets the requirements in paragraph (4) ~~[paragraphs (5) and (6)]~~ of this subsection. The ~~[(The)]~~ names of board certifications that have been recognized by the department ~~[agency]~~, the NRC, or an agreement state are posted ~~[appear]~~ on the NRC's Medical Uses Licensee Toolkit web page: ~~[at https://www.nrc.gov/materials/miau/med-use-toolkit/spee-board-cert.html].~~

(A) to ~~[To]~~ have its certification process recognized, a specialty board shall require all candidates for certification to:

(i) hold a bachelor's or graduate degree from an accredited college or university in physical science or engineering or bi-

ological science with a minimum of 20 college credits in physical science;

(ii) have five or more years of professional experience in health physics (graduate training may be substituted for no more than two years of the required experience) including at least three years in applied health physics; and

(iii) pass an examination, administered by diplomates of the specialty board, which evaluates knowledge and competence in radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity, radiation biology and radiation dosimetry; or

(B) to ~~[To]~~ have its certification process recognized, a specialty board shall require all candidates for certification to:

(i) hold a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university;

(ii) have two years of full-time practical training and/or supervised experience in medical physics as follows:

(I) under the supervision of a medical physicist who is certified in medical physics by a specialty board recognized by the department ~~[agency]~~, the NRC, or an agreement state; or

(II) in clinical nuclear medicine facilities providing diagnostic and/or therapeutic services under the direction of physicians who meet the requirements for authorized users in subsections (l), (j), or (n) of this section; and

(iii) pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in clinical diagnostic radiological or nuclear medicine physics and in radiation safety; or

(2) ~~[meets the requirements of paragraphs (5) and (6) of this subsection and]~~ has completed all of the following:

(A) a structured educational program consisting of both ~~[the following]:~~

(i) ~~[(A)]~~ 200 hours of classroom and laboratory training in the following areas:

(I) ~~[(i)]~~ radiation physics and instrumentation;

(II) ~~[(ii)]~~ radiation protection;

(III) ~~[(iii)]~~ mathematics pertaining to the use and measurement of radioactivity;

(IV) ~~[(iv)]~~ radiation biology; and

(V) ~~[(v)]~~ radiation dosimetry; and

(ii) ~~[(B)]~~ one year of full-time radiation safety experience under the supervision of the individual identified as the RSO on an agency, NRC, or agreement state license or on a permit issued by an NRC master material licensee that authorizes similar type(s) of use(s) of radioactive material. An ARSO may provide supervision for those areas for which the ARSO is authorized on an agency, NRC, or an agreement state license or a permit issued by an NRC master material licensee. The full-time radiation safety experience must involve ~~[involving]~~ the following:

(I) ~~[(i)]~~ shipping, receiving, and performing related radiation surveys;

(II) ~~[(ii)]~~ using and performing checks for proper operation of ~~[dose calibrators, survey meters, and]~~ instruments used to

determine the activity of dosages, survey meters, and instrument used to measure radionuclides;

(III) [(iii)] securing and controlling radioactive material;

(IV) [(iv)] using administrative controls to avoid mistakes in the administration of radioactive material;

(V) [(v)] using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures;

(VI) [(vi)] using emergency procedures to control radioactive material; and

(VII) [(vii)] disposing of radioactive material; and [or]

(B) has obtained written attestation, signed by a preceptor RSO or ARSO who has experience with the radiation safety aspects of similar types of use of radioactive material for which the individual is seeking approval as an RSO or an ARSO, and the written attestation must state that the individual has satisfactorily completed the requirements in paragraphs (2)(A) and (4) of this subsection, and is able to independently fulfill the radiation safety-related duties as an RSO or as an ARSO for a medical use license; or

(3) meets one of the following:

(A) is a medical physicist who has been certified by a specialty board whose certification process has been recognized by the department [agency], the NRC, or an agreement state in accordance with subsection (j)(1) of this section and has experience with the [in] radiation safety aspects of [for] similar types of use of radioactive material for which the licensee is seeking the approval of the individual as RSO or an ARSO and who meets the requirements in paragraph (4) [paragraphs (5) and (6)] of this subsection; [or]

(B) [(4)] is an authorized user, authorized medical physicist, or authorized nuclear pharmacist identified on an agency, NRC, or another agreement state's [the licensee's] license, a permit issued by a NRC master material licensee, a permit issued by the department, the NRC, or another agreement state licensee of broad scope, or a permit issued by a NRC master material license broad scope permittee, has experience with the radiation safety aspects of similar types of use of radioactive material for which the licensee is seeking the approval of the individual as the RSO or ARSO, and who meets the requirements in paragraph (4) of this subsection; or

(C) [and] has experience with the radiation safety aspects of the [similar] types of use of radioactive material for which the individual is seeking simultaneous approval both as the RSO and the authorized user on the same new medical use license or new medical use permit issued by a NRC master material license. The individual must also meet the requirements in paragraph (4) of this subsection [has RSO responsibilities]; and

[(5) has obtained written attestation, signed by a preceptor RSO, that the individual has satisfactorily completed the requirements in paragraph (6) of this subsection and in paragraphs (1)(A)(i) and (ii) or (1)(B)(i) and (ii), or (2), (3), or (4) of this subsection, and has achieved a level of radiation safety knowledge sufficient to function independently as an RSO for a medical use license; and]

(4) [(6)] has training in the radiation safety, regulatory issues, and emergency procedures for the types of use for which a licensee seeks approval, and this [- This] training requirement may be satisfied by completing training that is supervised by an [a] RSO, an ARSO, authorized medical physicist, authorized nuclear pharmacist,

or authorized user, as appropriate, who is authorized for the type(s) of use for which the licensee is seeking approval.

(i) Radiation safety committee (RSC). Licensees of [with] broad scope [authorization] and licensees who are authorized for two or more different types of uses of radioactive material in accordance with subsections (kk), (rr), and (ddd) of this section, or two or more types of units under subsection (ddd) of this section shall establish an RSC to oversee all uses of radioactive material permitted by the license.

(1) The RSC for licenses for medical use with broad scope authorization shall be composed of the following individuals as approved by the department [agency]:

(A) authorized users from each type of use of radioactive material authorized on the license;

(B) the RSO;

(C) a representative of nursing service;

(D) a representative of management who is neither an authorized user nor the RSO; and

(E) may include other members as the licensee deems appropriate.

(2) The RSC for licenses for medical and veterinary use authorized for two or more different types of uses of radioactive material in accordance with subsections (kk), (rr), and (ddd) of this section, or two or more types of units in accordance with subsection (ddd) of this section shall be composed of the following individuals as approved by the department [agency]:

(A) an authorized user of each type of use permitted by the license;

(B) the RSO;

(C) a representative of nursing service, if applicable;

(D) a representative of management who is neither an authorized user nor the RSO; and

(E) may include other members as the licensee deems appropriate.

(3) Duties and responsibilities of the RSC.

(A) For licensees without broad scope authorization, the duties and responsibilities of the RSC include[-; but are not limited to,] the following:

(i) meeting as often as necessary to conduct business but no less than three times a year;

(ii) reviewing summaries of the following information presented by the RSO:

(I) over-exposures;

(II) significant incidents, including spills, contamination, or medical events; and

(III) items of non-compliance following an inspection;

(iii) reviewing the program for maintaining doses ALARA, and providing any necessary recommendations to ensure doses are ALARA; and

(iv) reviewing the audit of the radiation safety program and acting upon the findings.

(B) For licensees of ~~[with]~~ broad scope ~~[authorization]~~, the duties and responsibilities of the RSC include~~;~~ ~~but are not limited to;~~ the items in subparagraph (A) of this paragraph and the following:

(i) reviewing the overall compliance status for authorized users;

(ii) sharing responsibility with the RSO to conduct periodic audits of the radiation safety program;

(iii) developing criteria to evaluate training and experience of new authorized user applicants;

(iv) evaluating and approving authorized user applicants who request authorization to use radioactive material at the facility; and

(v) reviewing and approving permitted program and procedural changes ~~before~~ ~~[prior to]~~ implementation.

(4) Records documenting the RSC meetings shall be made and maintained for inspection by the ~~department~~ ~~[agency]~~ in accordance with subsection ~~(xxx)~~ ~~[(www)]~~ of this section. The record shall include the date, names of individuals in attendance, minutes of the meeting, and any actions taken.

(j) Training for an authorized medical physicist. Except as provided in subsection (l) of this section, the licensee shall require the authorized medical physicist to be ~~[an individual who]~~:

(1) ~~an individual who~~ is certified by a specialty board whose certification process has been recognized by the ~~department~~ ~~[agency]~~, the NRC, or an agreement state and who meets the requirements in ~~paragraph (3)~~ ~~[paragraphs (2)(C) and (3)]~~ of this subsection. ~~The~~ ~~[(The)]~~ names of board certifications that have been recognized by the ~~department~~ ~~[agency]~~, the NRC, or an agreement state are ~~posted~~ ~~[appear]~~ on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]. To have its certification process recognized, a specialty board shall require all candidates for certification to meet the following:

(A) hold a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university;

(B) complete two years of full-time practical training and/or supervised experience in medical physics as follows:

(i) under the supervision of a medical physicist who is certified in medical physics by a specialty board ~~whose certification process has been recognized by the~~ ~~department~~ ~~[agency]~~, the NRC, or an agreement state; or

(ii) in clinical radiation facilities providing high-energy, external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services under the direction of physicians who meet the requirements for authorized users in subsections (l), (zz) or (ttt) of this section; and

(C) pass an examination administered by diplomates of the specialty board that assesses knowledge and competence in clinical radiation therapy, radiation safety, calibration, quality assurance, and treatment planning for external beam therapy, brachytherapy, and stereotactic radiosurgery; or

(2) ~~an individual who~~:

(A) holds a post graduate degree and experience to include:

(i) ~~[(A)]~~ a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university; and

(ii) ~~[(B)]~~ completion of one year of full-time training in medical physics and an additional year of full-time work experience under the supervision of an individual who meets the requirements for an authorized medical physicist for the type(s) of use for which the individual is seeking authorization, ~~and this~~ ~~[- This]~~ training and work experience shall be conducted in clinical radiation facilities that provide high-energy, external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services and shall include:

(I) ~~[(I)]~~ performing sealed source leak tests and inventories;

(II) ~~[(II)]~~ performing decay corrections;

(III) ~~[(III)]~~ performing full calibration and periodic spot checks of external beam treatment units, stereotactic radiosurgery units, and remote afterloading units as applicable; and

(IV) ~~[(IV)]~~ conducting radiation surveys around external beam treatment units, stereotactic radiosurgery units, and remote afterloading units as applicable; and

(B) ~~[(C)]~~ has obtained written attestation that the individual has satisfactorily completed the requirements in ~~paragraph (3)~~ ~~of this subsection and~~ paragraphs ~~(2)(A) and (3)~~ ~~[(1)(A) and (1)(B) or (2)(A) and (2)(B)]~~ of this subsection, and is able to ~~[has achieved a level of competency sufficient to function]~~ independently fulfill the radiation safety-related duties as an authorized medical physicist for each type of therapeutic medical unit for which the individual is requesting authorized medical physicist status, and the ~~[- The]~~ written attestation shall be signed by a preceptor authorized medical physicist who meets the requirements in subsection (l) of this section, this subsection, or equivalent NRC or agreement state requirements for an authorized medical physicist for each type of therapeutic medical unit for which the individual is requesting authorized medical physicist status; and

(3) ~~an individual who~~ has training for the type(s) of use for which authorization is sought that includes hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system. This training requirement may be satisfied by satisfactorily completing either a training program provided by the vendor or by training supervised by an authorized medical physicist authorized for the type(s) of use for which the individual is seeking authorization.

(k) Training for an authorized nuclear pharmacist. Except as provided in subsection (l) of this section, the licensee shall require the authorized nuclear pharmacist to be a pharmacist who:

(1) is certified by a specialty board whose certification process has been recognized by the ~~department~~ ~~[agency]~~, the NRC, or an agreement state ~~[and who meets the requirements of paragraph (2)(C) of this subsection]~~. ~~The~~ ~~[(The)]~~ names of board certifications that have been recognized by the ~~department~~ ~~[agency]~~, the NRC, or an agreement state are ~~posted~~ ~~[appear]~~ on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]. To have its certification process recognized, a specialty board shall require all candidates for certification to:

(A) have graduated from a pharmacy program accredited by the Accreditation Council for Pharmacy Education (ACPE) or have passed the Foreign Pharmacy Graduate Examination Committee (FPGEC) examination;

(B) hold a current, active license to practice pharmacy in the State of Texas;

(C) provide evidence of having acquired at least 4000 hours of training/experience in nuclear pharmacy practice. Academic training may be substituted for no more than 2000 hours of the required training and experience; and

(D) pass an examination in nuclear pharmacy administered by diplomates of the specialty board, that assesses knowledge and competency in procurement, compounding, quality assurance, dispensing, distribution, health and safety, radiation safety, provision of information and consultation, monitoring patient outcomes, research and development; or

(2) has completed:

(A) a 700-hour [700 hour] structured educational program, including both:

(i) [(A)] 200 hours of classroom and laboratory training in the following areas:

(I) [(i)] radiation physics and instrumentation;

(II) [(ii)] radiation protection;

(III) [(iii)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(iv)] chemistry of radioactive material for medical use; and

(V) [(v)] radiation biology; and

(ii) [(B)] supervised practical experience in a nuclear pharmacy involving the following:

(I) [(i)] shipping, receiving, and performing related radiation surveys;

(II) [(ii)] using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and, if appropriate, instruments used to measure alpha- or beta-emitting radionuclides;

(III) [(iii)] calculating, assaying, and safely preparing dosages for patients or human research subjects;

(IV) [(iv)] using administrative controls to avoid medical events in the administration of radioactive material; and

(V) [(v)] using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures; and

(B) [(C)] has obtained written attestation, signed by a preceptor authorized nuclear pharmacist, that the individual has satisfactorily completed the requirements in paragraph (2)(A) [(1)(A), (B) and (C) or (2)(A) and (B)] of this subsection [or this paragraph] and is able to [has achieved a level of competency sufficient to function] independently fulfill the radiation safety-related duties as an authorized nuclear pharmacist.

(l) Training for experienced RSO, teletherapy or medical physicist, authorized medical physicist, authorized user, nuclear pharmacist, and authorized nuclear pharmacist.

(1) An individual identified on an agency, NRC, or an agreement state license or a permit issued by the department, the NRC, or an agreement state broad scope licensee or master material license permit or by a master material license permittee of broad scope as an RSO, a teletherapy or medical physicist, an authorized medical physicist, a nuclear pharmacist or an authorized nuclear pharmacist

on or before January 14, 2019, need not comply with the training requirements of subsections (h), (j), and (k) of this section, respectively, except the RSO and authorized medical physicists identified in this paragraph must meet the training requirements in subsections (h)(4) or (j)(3) of this section, as appropriate, for any material or uses for which they were not authorized before this date. [An individual identified as an RSO, a teletherapy or medical physicist, or a nuclear pharmacist on one of the following before October 24, 2002, need not comply with the training requirements of subsections (h), (j), or (k) of this section, respectively:]

[(A) an agency, NRC, or agreement state license;]

[(B) a permit issued by an agency, NRC, or agreement state licensee with broad scope authorization;]

[(C) an NRC master material license permit; or]

[(D) an NRC master material license permit with broad scope authorization.]

(2) Any individual certified by the American Board of Health Physics in Comprehensive Health Physics; American Board of Radiology; American Board of Nuclear Medicine; American Board of Science in Nuclear Medicine; Board of Pharmaceutical Specialties in Nuclear Pharmacy; American Board of Medical Physics in radiation oncology physics; Royal College of Physicians and Surgeons of Canada in nuclear medicine; American Osteopathic Board of Radiology; or American Osteopathic Board of Nuclear Medicine on or before October 24, 2005, need not comply with the training requirements of subsection (h) of this section to be identified as an RSO or as an ARSO on an agency, NRC, or agreement state license or NRC master material license permit for those materials and uses that these individuals performed on or before October 24, 2005. [An individual identified as an RSO, an authorized medical physicist, or an authorized nuclear pharmacist on one of the following between October 24, 2002, and April 29, 2005, need not comply with the training requirements of subsections (h), (j) and (k) of this section, respectively:]

[(A) an agency, NRC, or agreement state license;]

[(B) a permit issued by the agency, the NRC, or an agreement state with broad scope authorization;]

[(C) an NRC master material license permit; or]

[(D) an NRC master material license permit with broad scope authorization.]

(3) Any individual certified by the American Board of Radiology in therapeutic radiological physics, Roentgen ray and gamma ray physics, xray and radium physics, or radiological physics, or certified by the American Board of Medical Physics in radiation oncology physics, on or before October 24, 2005, need not comply with the training requirements for an authorized medical physicist described in subsection (j) of this section, for those materials and uses that these individuals performed on or before October 24, 2005.

(4) An RSO, a medical physicist, or a nuclear pharmacist, who used only accelerator-produced radioactive materials, discrete sources of radium-226, or both, for medical uses or in the practice of nuclear pharmacy at a government agency or federally recognized Indian Tribe before November 30, 2007, or at all other locations of use before August 8, 2009, or an earlier date as noticed by the NRC, need not comply with the training requirements of subsections (h), (j) or (k) of this section, respectively, when performing the same uses. A nuclear pharmacist, who prepared only radioactive drugs containing accelerator-produced radioactive materials, or a medical physicist, who used only accelerator-produced radioactive materials, at the locations and during the time period identified in this paragraph,

qualifies as an authorized nuclear pharmacist or an authorized medical physicist, respectively, for those materials and uses performed before these dates, for the purposes of this chapter.

(5) [(3)] An individual identified as a physician, dentist, podiatrist or veterinarian authorized for the medical or veterinary use of radioactive material. [and who performs only those medical or veterinary uses for which they were authorized on one of the following before the effective date of this rule need not comply with the training requirements of subsections (gg) - (ttt) of this section:]

[(A) an agency, NRC, or agreement state license;]

[(B) a permit issued by the agency, the NRC, or an agreement state licensee with broad scope authorization;]

[(C) an NRC master material license permit; or]

[(D) an NRC master material license permit with broad scope authorization.]

(A) Physicians, dentists, or podiatrists identified as authorized users for the medical use of radioactive material on a license issued by the department, the NRC, or an agreement state, a permit issued by an NRC master material licensee, a permit issued by the department, the NRC, or an agreement state broad scope licensee, or a permit issued by an NRC master material license broad scope permittee on or before January 14, 2019, who perform only those medical uses for which they were authorized on or before that date need not comply with the training requirements of subsections (gg) through (ttt) of this section.

(B) Physicians, dentists, or podiatrists not identified as authorized users for the medical use of radioactive material on a license issued by the department, the NRC, or an agreement state, a permit issued by an NRC master material licensee, a permit issued by the department, the NRC, or an agreement state broad scope licensee, or a permit issued by an NRC master material license of broad scope on or before October 24, 2005, need not comply with the training requirements of subsections (gg) through (ttt) of this section for those materials and uses that these individuals performed on or before October 24, 2005, as follows:

(i) For uses authorized under subsections (ff) or (hh) of this section, or oral administration of sodium iodide I-131 requiring a written directive for imaging and localization purposes, a physician who was certified on or before October 24, 2005, in nuclear medicine by the American Board of Nuclear Medicine; diagnostic radiology by the American Board of Radiology; diagnostic radiology or radiology by the American Osteopathic Board of Radiology; nuclear medicine by the Royal College of Physicians and Surgeons of Canada; or American Osteopathic Board of Nuclear Medicine in nuclear medicine;

(ii) For uses authorized under subsection (kk) of this section, a physician who was certified on or before October 24, 2005, by the American Board of Nuclear Medicine; the American Board of Radiology in radiology, therapeutic radiology, or radiation oncology; nuclear medicine by the Royal College of Physicians and Surgeons of Canada; or the American Osteopathic Board of Radiology after 1984;

(iii) For uses authorized under subsections (rr) or (ddd) of this section, a physician who was certified on or before October 24, 2005, in radiology, therapeutic radiology or radiation oncology by the American Board of Radiology; radiation oncology by the American Osteopathic Board of Radiology; radiology, with specialization in radiotherapy, as a British "Fellow of the Faculty of Radiology" or "Fellow of the Royal College of Radiology"; or therapeutic radiology by the Canadian Royal College of Physicians and Surgeons; and

(iv) For uses authorized under subsection (bbb) of this section, a physician who was certified on or before October 24, 2005, in radiology, diagnostic radiology, therapeutic radiology, or radiation oncology by the American Board of Radiology; nuclear medicine by the American Board of Nuclear Medicine; diagnostic radiology or radiology by the American Osteopathic Board of Radiology; or nuclear medicine by the Royal College of Physicians and Surgeons of Canada.

(C) Physicians, dentists, or podiatrists who used only accelerator-produced radioactive materials, discrete sources of radium-226, or both, for medical uses performed at a government agency or federally recognized Indian Tribe before November 30, 2007, or at all other locations of use before August 8, 2009, or an earlier date as noticed by the NRC, need not comply with the training requirements of subsections (gg) through (ttt) of this section when performing the same medical uses. A physician, dentist, or podiatrist, who used only accelerator-produced radioactive materials, discrete sources of radium-226, or both, for medical uses at the locations and time period identified in this paragraph, qualifies as an authorized user for those materials and uses performed before these dates, for the purposes of this chapter.

(6) [(4)] Individuals who need not comply with training requirements in this subsection may serve as preceptors for, and supervisors of, applicants seeking authorization on an agency, NRC, or agreement state license for the same uses for which these individuals are authorized.

(m) Recentness of training. The training and experience specified in subsections (h), (j) [- (mm)], and (gg) - (ttt) of this section for medical and veterinary use shall have been obtained within the seven years preceding the date of application or the individual shall have had related continuing education and experience since the required training and experience was completed.

(n) Licenses for medical and veterinarian uses of radioactive material without broad scope authorization. In addition to the requirements of subsection (f) of this section, a license for medical and veterinarian use of radioactive material as described in the applicable subsections (ff), (hh), (kk), (rr), (bbb) and (ddd) of this section will be issued if the department [agency] approves the following documentation submitted by the applicant:

(1) that the physician(s) or veterinarian(s) designated on the application as the authorized user(s) is qualified in accordance with subsections (gg), (jj), (nn) - (qq), (zz), (aaa), (ccc) and (ttt) of this section, as applicable;

(2) that the radiation detection and measuring instrumentation is appropriate for performing surveys and procedures for the uses involved;

(3) that the radiation safety operating procedures are adequate for the handling and disposal of the radioactive material involved in the uses; and

(4) that an RSC has been established in accordance with subsection (i)(2) of this section, if applicable.

(o) License for medical and veterinary uses of radioactive material with broad scope authorization. In addition to the requirements of subsection (f) of this section, a license for medical use of radioactive material with broad scope authorization will be issued if the department [agency] approves the following documentation submitted by the applicant:

(1) that the review of authorized user qualifications by the RSC is in accordance with subsections (gg), (jj), (nn) - (qq), (zz), (aaa), (ccc) and (ttt) of this section, as applicable;

(2) that the application is for a license authorizing unspecified forms and/or multiple types of radioactive material for medical research, diagnosis, and therapy;

(3) that the radiation detection and measuring instrumentation is appropriate for performing surveys and procedures for the uses involved;

(4) that the radiation safety operating procedures are adequate for the handling and disposal of the radioactive material involved in the uses;

(5) that staff has substantial experience in the use of a variety of radioactive material for a variety of human and animal uses;

(6) that the full-time RSO meets the requirements of subsection (h) of this section; and

(7) that an RSC has been established in accordance with subsection (i)(1) of this section.

(p) License for the use of remote afterloader units [~~control brachytherapy units~~], teletherapy units, or gamma stereotactic radiosurgery units. In addition to the requirements of subsection (f) of this section, a license for the use of remote afterloader [~~control brachytherapy (RCB)~~] units, teletherapy units, or gamma stereotactic radiosurgery units will be issued if the department [~~agency~~] approves the following documentation submitted by the applicant:

(1) that the physician(s) designated on the application as the authorized user(s) is qualified in accordance with subsection (ttt) of this section;

(2) that the radiation detection and measuring instrumentation is appropriate for performing surveys and procedures for the uses involved;

(3) that the radiation safety operating procedures are adequate for the handling and disposal of the radioactive material involved in the uses;

(4) of the radioactive isotopes to be possessed;

(5) of the sealed source manufacturer(s) name(s) and the model number(s) of the sealed source(s) to be installed;

(6) of the maximum number of sealed sources of each isotope to be possessed, including the activity of each sealed source;

(7) of the manufacturer and model name and/or number of the following units, as applicable:

(A) remote afterloader [RCB] unit;

(B) teletherapy unit; or

(C) gamma stereotactic radiosurgery unit;

(8) that the authorized medical physicist designated on the application is qualified in accordance with subsection (j) of this section;

~~[(9) of the successful completion of unit-specific, manufacturer-provided training that includes standard clinical and emergency procedures for remote control brachytherapy and gamma stereotactic radiosurgery units for the following personnel:]~~

~~[(A) authorized medical physicist of this section;]~~

~~[(B) technologists; and]~~

~~[(C) authorized user;]~~

(9) [(10)] of the safety procedures and instructions as required by subsection (ggg) of this section;

(10) [(11)] of the spot check procedures as required by subsections (mmm) - (ooo) of this section, as applicable; and

(11) [(12)] that an RSC has been established in accordance with subsection (i)(1) or (2) of this section if applicable.

(q) License for other medical or veterinary uses of radioactive material or a radiation source approved for medical or veterinary use that is not specifically addressed in this section. In addition to [A licensee may use radioactive material or a radiation source approved for medical use which is not specifically addressed in this section if] the requirements of subsection (f) of this section [have been met], a licensee may use radioactive material or a radiation source approved for medical use which is not specifically addressed in this section if: [the applicant or licensee has received written approval from the agency in a license or license amendment and the licensee uses the material in accordance with the regulations and specific conditions the agency considers necessary for the medical use of the material.]

(1) the department approves the following documentation submitted by the applicant:

(A) any additional aspects of the medical use of the material that are applicable to radiation safety that are not addressed in, or differ from, requirements in this section;

(B) identification of and commitment to follow the applicable radiation safety program requirements in this section that are appropriate for the specific medical use;

(C) any additional specific information on:

(i) radiation safety precautions and instructions;

(ii) methodology for measurement of dosages or doses to be administered to patients or human research subjects; and

(iii) calibration, maintenance, and repair of instruments and equipment necessary for radiation safety; and

(D) any other information requested by the department in its review of the application; and

(2) the applicant or licensee has received written approval from the department in a license or license amendment and the licensee uses the material in accordance with the regulations and specific conditions the department considers necessary for the medical use of the material.

(r) License amendments and notifications [Amendment of licenses at request of licensee].

(1) Requests for amendment of a license or deletion of an authorized use site shall be filed in accordance with §289.252(aa) of this title.

(2) A licensee [~~without broad-scope authorization~~] shall apply for and shall receive a license amendment before [prior to] the following:

(A) receiving or using radioactive material for a type of use that is authorized in accordance with this section, but is not authorized on their current license issued in accordance with this section;

(B) permitting anyone to work as an authorized user, authorized nuclear pharmacist, [~~or~~] authorized medical physicist, or ophthalmic physicist, under the license except an individual who is identified as an authorized user, an authorized nuclear pharmacist, authorized medical physicist, or an ophthalmic physicist;[;]

(i) on an agency, NRC or agreement state license or other equivalent permit or license recognized by the department that

authorizes the use of radioactive material in medical use or in the practice of nuclear pharmacy;

(ii) on a permit issued by an agency, NRC or agreement state specific license of broad scope that is authorized to permit the use of radioactive material in medical use or in the practice of nuclear pharmacy;

(iii) on a permit issued by an NRC master material licensee that is authorized to permit the use of radioactive material in medical use or in the practice of nuclear pharmacy; or

(iv) by a commercial nuclear pharmacy that has been authorized to identify authorized nuclear pharmacists.

(C) changing RSOs, except as provided in subsection (g)(7) [(g)(5)] of this section;

(D) receiving radioactive material in excess of the amount or in a different form, or receiving a different radionuclide than is authorized on the license;

(E) adding or changing the areas in which radioactive material is used or stored and are identified in the application or on the license, including areas used in accordance with subsection (ff) or (hh) of this section if the change includes addition or relocation of either an area where positron emission tomography (PET) radionuclides are produced or a PET radioactive drug delivery line from the PET radionuclide/PET radioactive drug production area, and other areas of use where radioactive material is used only in accordance with either subsection (ff) or (hh) of this section are exempt;

(F) changing the address(es) of use identified in the application or on the license; [and]

(G) changing operating, safety, and emergency procedures; [-]

(H) before permitting anyone to work as an ARSO, or before the RSO assigns duties and tasks to an ARSO that differ from those for which this individual is authorized on the license; and

(I) before receiving a sealed source from a different manufacturer or of a different model number than authorized by its license unless the sealed source is used for manual brachytherapy, is listed in the Sealed Source and Device Registry, and is in a quantity and for an isotope authorized by the license.

(3) A licensee possessing a Type A specific license of broad scope for medical use, issued under §289.252(h)(2) of this title, is exempt from:

(A) the provisions of subsection (q)(1) of this section regarding the need to file an amendment to the license for medical use of radioactive material;

(B) the provisions of paragraph (2)(B) of this subsection;

(C) the provisions of paragraph (2)(E) of this subsection regarding additions to or changes in the areas of use at the addresses identified in the application or on the license;

(D) the provisions of paragraph (4) of this subsection;

(E) the provisions of paragraph (5)(A) of this subsection for an authorized user, an authorized nuclear pharmacist, an authorized medical physicist, or an ophthalmic physicist;

(F) the provisions of paragraph (5)(C) of this subsection; and

(G) the provisions of subsection (u)(1) of this section.

(4) A licensee shall notify the department in the form of a license amendment request, no later than 30 days after the date that the licensee permits an individual to work under the provisions of §289.256(r) as an authorized user, authorized medical physicist, ophthalmic physicist, or authorized nuclear pharmacist providing that the individual is authorized on a license for the same use. A licensee includes with the notification documentation:

(A) a copy of the department, NRC, or agreement state license;

(B) the permit issued by an NRC master material licensee;

(C) the permit issued by the department, the NRC, or an agreement state licensee of broad scope; or

(D) the permit issued by an NRC master material licensee broad scope permittee.

(5) A licensee shall notify the department in the form of a license amendment request no later than 30 days after:

(A) an authorized user, an authorized nuclear pharmacist, an RSO, an ARSO, an authorized medical physicist, or ophthalmic physicist permanently discontinues performance of duties under the license or has a name change;

(B) the licensee permits an individual qualified to be an RSO under subsections (h) and (m) of this section to function as a temporary RSO and to perform the functions of an RSO in accordance with subsection (g)(6) of this section;

(C) the licensee has added to or changed the areas of use identified in the application or on the license where byproduct material is used in accordance with either subsection (ff) or (hh) of this section, if the change does not include addition or relocation of either an area where PET radionuclides are produced or a PET radioactive drug delivery line from the PET radionuclide/PET radioactive drug production area; or

(D) the licensee obtains a sealed source for use in manual brachytherapy from a different manufacturer or with a different model number than authorized by its license for which it did not require a license amendment as provided in paragraph (1) of this subsection. The notification must include the manufacturer and model number of the sealed source, the isotope, and the quantity per sealed source.

{(3) A licensee with broad-scope authorization shall apply for and shall receive a license amendment prior to taking actions specified in paragraph (2)(A), (C), (D), (F) and (G) of this subsection.}

(s) Supervision. A licensee may permit the receipt, possession, use, or transfer of radioactive material by an individual under the supervision of an authorized user, unless prohibited by license condition.

(1) A licensee who permits the receipt, possession, use, or transfer of radioactive material by an individual under the supervision of an authorized user shall do the following:

(A) instruct the supervised individual in the licensee's written operating, safety, and emergency procedures, written directive procedures, requirements of this chapter, and license conditions with respect to the use of radioactive material; and

(B) require the supervised individual to follow the instructions of the supervising authorized user for medical uses of radioactive material, written operating, safety, and emergency procedures established by the licensee, written directive procedures, require-

ments of this chapter, and license conditions with respect to the medical use of radioactive material.

(2) A licensee who permits the preparation of radioactive material for medical use by an individual under the supervision of an authorized nuclear pharmacist or authorized user, shall do the following:

(A) instruct the supervised individual in the preparation of radioactive material for medical use, as appropriate to that individual's involvement with radioactive material; and

(B) require the supervised individual to follow the instructions of the supervising authorized user or authorized nuclear pharmacist regarding the preparation of radioactive material for medical use, the written operating, safety, and emergency procedures established by the licensee, the requirements of this chapter, and license conditions.

(3) A licensee who permits supervised activities in accordance with paragraphs (1) and (2) of this subsection is responsible for the acts and omissions of the supervised individual.

(4) Only an authorized user may authorize the medical use of radioactive material.

(t) Written directives.

(1) A written directive shall be dated and signed by an authorized user ~~before [prior to]~~ any administration of sodium iodide I-131 greater than 30 microcuries (μCi) (1.11 megabecquerels (MBq)), administration of any therapeutic dosage of unsealed radioactive material, or administration of any therapeutic dose of radiation from radioactive material.

~~[(A) A written revision to an existing written directive may be made provided that the revision is dated and signed by an authorized user prior to the administration of the dosage of unsealed radioactive material, the brachytherapy dose, the gamma stereotactic radiosurgery dose, the teletherapy dose, or the next fractional dose.]~~

~~[(B) If, because of the emergent nature of the patient's condition, a delay in order to provide a written directive [or to revise a written directive] would jeopardize the patient's health, an oral directive [or an oral revision to an existing written directive] is acceptable. The information contained in the oral directive [or oral revision] shall be documented in writing as soon as possible in the patient's record. A written directive [or revised written directive] shall be prepared and signed by the authorized user within 48 hours of the oral directive [or oral revision].~~

(2) The written directive shall contain the patient or human research subject's name and the following information for each application.

(A) For any administration of quantities greater than 30 μCi (1.11 MBq) of sodium iodide I-131:^[;] the dosage.

(B) For an administration of a therapeutic dosage of a radiopharmaceutical other than sodium iodide I-131:

~~[(#)] the radiopharmaceutical,^[;]~~

~~[(##)] the dosage,^[;] and~~

~~[(###)] the route of administration.~~

(C) For gamma stereotactic radiosurgery:

~~[(#)] the total dose,^[;]~~

~~[(##)] the treatment site,^[;] and~~

~~[(###)] the values for the target coordinate settings per treatment for each anatomically distinct treatment site.~~

(D) For teletherapy:

~~[(#)] the total dose,^[;]~~

~~[(##)] the dose per fraction,^[;]~~

~~[(###)] the number of fractions,^[;] and~~

~~[(###)] the treatment site.~~

(E) For high-dose rate remote afterloading brachytherapy:

~~[(#)] the radionuclide,^[;]~~

~~[(##)] the treatment site,^[;]~~

~~[(###)] the dose per fraction,^[;]~~

~~[(###)] the number of fractions,^[;] and~~

~~[(###)] the total dose.~~

(F) For permanent implant brachytherapy:

~~(i) before implantation: the treatment site, the radionuclide, and the total source strength; and~~

~~(ii) after implantation but before the patient leaves the post-treatment recovery area: the treatment site, the number of sources implanted, the total source strength implanted, and the date.~~

(G) ~~[(F)]~~ For all other brachytherapy, including low, medium, and pulsed rate afterloaders:

~~(i) before [prior to] implantation:~~

~~[(#)] the treatment site,^[;]~~

~~[(##)] the radionuclide,^[;] and~~

~~[(###)] the dose;~~

~~(ii) after implantation but before [prior to] completion of the procedure:~~

~~[(#)] the radionuclide,^[;]~~

~~[(##)] the treatment site,^[;]~~

~~[(###)] the number of sealed sources,^[;]~~

~~[(###)] the total sealed source strength,^[;] and~~

~~[(###)] exposure time (or the total dose), and the date [(or, the total dose)].~~

(3) ~~A written revision to an existing written directive.~~

~~(A) A written revision to an existing written directive may be made if the revision is dated and signed by an authorized user before the administration of the dosage of unsealed radioactive material, the brachytherapy dose, the gamma stereotactic radiosurgery dose, the teletherapy dose, or the next fractional dose.~~

~~(B) If, because of the patient's condition, a delay in order to provide a written revision to an existing written directive would jeopardize the patient's health, an oral revision to an existing written directive is acceptable. The oral revision must be documented as soon as possible in the patient's record. A revised written directive must be signed by the authorized user within 48 hours of the oral revision.~~

(4) ~~[(3)]~~ The licensee shall retain the written directive in accordance with subsection ~~(xxx)~~ ~~[(www)]~~ of this section for inspection by the ~~department~~ ~~[agency]~~.

(5) [(4)] Procedures for administrations requiring a written directive.

(A) For any administration requiring a written directive, the licensee shall develop, implement, and maintain written procedures to provide high confidence [ensure] that:

(i) the patient's or human research subject's identity is verified before each administration; and

(ii) each administration is in accordance with the written directive.

(B) The procedures required by subparagraph (A) of this paragraph shall, at a minimum, address the following items that are applicable for the licensee's use of radioactive material:

(i) verifying the identity of the patient or human research subject;

(ii) verifying that the administration is in accordance with the treatment plan, if applicable, and the written directive;

(iii) checking both manual and computer-generated dose calculations; and

(iv) verifying that any computer-generated dose calculations are correctly transferred into the consoles of therapeutic medical units authorized by subsections (q) and (ddd) [subsection (dd)] of this section; [-]

(v) determining if a medical event, as defined in subsection (uuu) of this section, has occurred; and

(vi) determining, for permanent implant brachytherapy, within 60 calendar days from the date the implant was performed, the total source strength administered outside of the treatment site compared to the total source strength documented in the post-implantation portion of the written directive, unless a written justification of patient unavailability is documented.

(C) A licensee shall maintain a copy of the procedures required by subparagraph (A) of this paragraph in accordance with subsection (xxx) [(www)] of this section.

(u) Suppliers for sealed sources or devices for medical use. A licensee may only use the following for medical use:

(1) sealed sources or devices manufactured, labeled, packaged, and distributed in accordance with a license issued under §289.252(o) of this title or equivalent requirements of [by the agency;] the NRC[-] or an agreement state;

(2) sealed sources or devices non-commercially transferred from an NRC or agreement state medical use licensee; or

(3) teletherapy sources manufactured and distributed in accordance with a license issued by the department [agency], the NRC, or an agreement state.

(v) Possession, use, and calibration of dose calibrators to measure the activity of unsealed radioactive material.

(1) For direct measurements performed in accordance with subsection (x) of this section, the licensee shall possess and use instrumentation to measure the activity of unsealed radioactive material before it is administered to each patient or human research subject.

(2) The licensee shall calibrate the instrumentation specified in paragraph (1) of this subsection in accordance with nationally recognized standards or the manufacturer's instructions.

(3) The calibration required by paragraph (2) of this subsection shall include tests for constancy, accuracy, linearity, and geom-

etry dependence, as appropriate to demonstrate proper operation of the instrument. The tests for constancy, accuracy, linearity, and geometry dependence shall be conducted at the following intervals:

(A) constancy at least once each day before [prior to] assay of patient dosages;

(B) linearity at installation, repair, relocation, and at least quarterly thereafter;

(C) geometry dependence at installation; and

(D) accuracy at installation and at least annually thereafter.

(4) The licensee shall maintain a record of each instrument calibration in accordance with subsection (xxx) [(www)] of this section. The record shall include the following:

(A) model and serial number of the instrument and calibration sources;

(B) complete date of the calibration including the month, day and year;

(C) results of the calibration; and

(D) name of the individual who performed the calibration.

(w) Calibration of survey instruments. A licensee shall calibrate the survey instruments used to show compliance with this subsection and with §289.202 of this title before first use, annually, and following a repair that affects the calibration. A licensee shall:

(1) calibrate all scales with readings up to 10 millisieverts (mSv) (1000 millirem (mrem)) per hour with a radiation source;

(2) calibrate two separated readings on each scale or decade that will be used to show compliance;

(3) conspicuously note on the instrument the complete date of the calibration including the month, day, and year;

(4) not use survey instruments if the difference between the indicated exposure rate and the calculated exposure rate is more than 20 percent [20%]; and

(5) maintain a record of each survey instrument calibration in accordance with subsection (xxx) [(www)] of this section.

(x) Determination of dosages of unsealed radioactive material for medical use.

(1) Before medical use, the licensee shall determine and record the activity of each dosage.

(2) For a unit dosage, this determination shall be made by:

(A) direct measurement of radioactivity; or

(B) a decay correction, based on the activity or activity concentration determined by the following:

(i) a manufacturer or preparer licensed in accordance with §289.252(r) of this title, or under an equivalent NRC or agreement state license;

(ii) an NRC or agreement state licensee for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by the FDA; or

(iii) a PET [positron emission tomography (PET)] radioactive drug producer licensed in accordance with §289.252(kk) of this title or equivalent NRC or agreement state requirements.

(3) For other than unit dosages, this determination shall be made by:

(A) direct measurement of radioactivity;

(B) combination of measurement of radioactivity and mathematical calculations; or

(C) combination of volumetric measurements and mathematical calculations, based on the measurement made by:

(i) a manufacturer or preparer licensed in accordance with §289.252(r) of this title, or under an equivalent NRC or agreement state license; or

(ii) a PET radioactive drug producer licensed in accordance with §289.252(kk) of this title or equivalent NRC or agreement state requirements.

(4) Unless otherwise directed by the authorized user, a licensee shall not use a dosage if the dosage does not fall within the prescribed dosage range or if the dosage differs from the prescribed dosage by more than 20 percent [20%].

(5) A licensee restricted to only unit doses prepared in accordance with §289.252(r) of this title need not comply with paragraph (2) of this subsection, unless the administration time of the unit dose deviates from the nuclear pharmacy's pre-calibrated time by 15 minutes or more.

(6) A licensee shall maintain a record of the dosage determination required by this subsection in accordance with subsection ~~(xxx) [(www)]~~ of this section for inspection by the department [agency]. The record shall contain the following:

(A) the radiopharmaceutical;

(B) patient's or human research subject's name or identification number if one has been assigned;

(C) prescribed dosage;

(D) determined dosage or a notation that the total activity is less than 30 μCi (1.1 MBq);

(E) the date and time of the dosage determination; and

(F) the name of the individual who determined the dosage.

(y) Authorization for calibration, transmission, and reference sources.

(1) Any licensee authorized by subsections (n), (o), (p) or (q) of this section for medical use of radioactive material may receive, possess, and use any of the following radioactive material for check, calibration, transmission, and reference use:

(A) ~~[(4)] sealed sources, not exceeding 30 millicuries (mCi) (1.11 gigabecquerel (GBq)) each, manufactured and distributed by a person licensed under §289.252(o) of this title or equivalent [in accordance with a license issued by the agency, the] NRC[,] or [another] agreement state regulations [and that do not exceed 30 millicuries (mCi) (1.11 gigabecquerel (GBq)) each];~~

(B) ~~[(2)] sealed sources, not exceeding 30 millicuries (mCi) (1.11 gigabecquerel (GBq)) each, redistributed by a licensee authorized to redistribute the sealed sources manufactured and distributed by a person licensed under §289.252(o) of this title or equivalent [in accordance with a license issued by the agency, the] NRC[,] or [another] agreement state regulations [and that do not exceed 30 mCi (1.11 GBq) each], provided the redistributed sealed sources are in the original pack-~~

aging and shielding and are accompanied by the manufacturer's approved instructions;

~~(C) [(3)] any radioactive material with a half-life not longer than 120 days in individual amounts not to exceed 15 mCi (0.56 GBq);~~

~~(D) [(4)] any radioactive material with a half-life longer than 120 days in individual amounts not to exceed the smaller of 200 μCi (7.4 MBq) or 1000 times the quantities in §289.202(ggg)(3) of this title; and~~

~~(E) [(5)] technetium-99m in amounts as needed.~~

(2) Radioactive material in sealed sources authorized by this subsection shall not be:

(A) used for medical use as defined in subsection (c) of this section except in accordance with the requirements in subsection (bbb) of this section; or

(B) combined (i.e., bundled or aggregated) to create an activity greater than the maximum activity of any single sealed source authorized under this section.

(3) A licensee using calibration, transmission, and reference sources in accordance with the requirements in paragraph (1) or (2) of this subsection need not list these sources on a specific medical use license.

(z) Requirements for possession of sealed sources and brachytherapy sealed sources. A licensee in possession of any sealed source or brachytherapy source shall:

(1) follow the radiation safety and handling instructions supplied by the manufacturer and the leakage test requirements in accordance with §289.201(g) of this title and reporting requirements in §289.202(bbb) of this title; and

(2) conduct a physical inventory at intervals not to exceed six months to account for all sealed sources in its possession. Records of the inventory shall be made and maintained for inspection by the department [agency] in accordance with subsection ~~(xxx) [(www)]~~ of this section and shall include the following:

(A) model number of each source and serial number if one has been assigned;

(B) identity of each source and its nominal activity;

(C) location of each source;

(D) date of the inventory; and

(E) identification of the individual who performed the inventory.

(aa) Labeling of vials and syringes. Each syringe and vial that contains a radiopharmaceutical shall be labeled to identify the radioactive drug. Each syringe shield and vial shield shall also be labeled unless the label on the syringe or vial is visible when shielded.

(bb) Surveys for ambient radiation exposure rate.

(1) In addition to the requirements of §289.202(p) of this title and except as provided in paragraph (2) of this subsection, a licensee shall survey with a radiation detection survey instrument at the end of each day of use all areas where radioactive material requiring a written directive was prepared for use or administered.

(2) A licensee does not need to perform the surveys required by paragraph (1) of this subsection in an area(s) where patients or human research subjects are confined when they cannot be released in accordance with subsection (c) of this section or an animal that

is confined. Once the patient or human or animal research subject is released from confinement, the licensee shall survey with a radiation survey instrument, the area in which the patient or human or animal research subject was confined.

(3) A record of each survey shall be retained in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

- (A) date of the survey;
- (B) results of the survey;
- (C) manufacturer's name, model, and serial number of the instrument used to make the survey; and
- (D) name of the individual who performed the survey.

(cc) Release of individuals containing radioactive drugs or implants containing radioactive material.

(1) The licensee may authorize the release from its control any individual who has been administered radioactive drugs or implants containing radioactive material if the total effective dose equivalent (TEDE) to any other individual from exposure to the released individual is not likely to exceed 0.5 rem (5 mSv). Patients treated with temporary eye plaques may be released from the hospital provided that the procedures ensure that the exposure rate from the patient is less than 5 mrem (0.05 mSv) per hour at a distance of 1 meter from the eye plaque location.

(2) The licensee shall provide the released individual, or the individual's parent or guardian, with written instructions on actions recommended to maintain doses to other individuals ALARA if the TEDE to any other individual is likely to exceed 0.1 rem (1 mSv). If the TEDE to a nursing infant or child could exceed 0.1 rem (1 mSv), assuming there was no interruption of breast-feeding, the instructions shall also include the following:

- (A) guidance on the interruption or discontinuation of breast-feeding; and
- (B) information on the potential consequences, if any, of failure to follow the guidance.

(3) The licensee shall maintain for inspection by the department [agency], a record in accordance with subsection (xxx) [(www)] of this section of each patient released in accordance with paragraph (1) of this subsection. The record shall include the following:

- (A) the basis for authorizing the release of an individual; and
- (B) the instructions provided to a breast-feeding woman. if the radiation dose to the infant or child from continued breast-feeding could result in a TEDE exceeding 0.5 rem (5 mSv).

(dd) Mobile nuclear medicine service. A license for a mobile nuclear medicine service for medical or veterinary use of radioactive material will be issued if the department [agency] approves the documentation submitted by the applicant in accordance with the requirements of subsections (f) and (n) of this section. The clients of the mobile nuclear medicine service shall be licensed if the client receives or possesses radioactive material to be used by the mobile nuclear medicine service.

(1) A licensee providing mobile nuclear medicine service shall:

(A) obtain a letter signed by the management of each client for which services are rendered that permits the use of radioactive

material at the client's address and clearly delineates the authority and responsibility of the licensee and the client;

(B) check instruments used to measure the activity of unsealed radioactive material for proper function before medical or veterinary use at each client's address or on each day of use, whichever is more frequent. At a minimum, the check for proper function required by this subparagraph shall include a constancy check;

(C) have at least one fixed facility where records may be maintained and radioactive material may be delivered by manufacturers or distributors each day before [~~prior to~~] the mobile nuclear medicine licensee dispatching its vans to client sites;

(D) agree to have an authorized physician user directly supervise each technologist at a reasonable frequency;

(E) check survey instruments for proper operation with a dedicated check source before use at each client's address; and

(F) before leaving a client's address, survey all areas of use to ensure compliance with the requirements of §289.202 of this title.

(2) A mobile nuclear medicine service shall not have radioactive material delivered from the manufacturer or the distributor to the client unless the client has a license allowing possession of the radioactive material. Radioactive material delivered to the client shall be received and handled in conformance with the client's license.

(3) A licensee providing mobile nuclear medicine services shall maintain records, for inspection by the department [agency], in accordance with subsection (xxx) [(www)] of this section including the letter required in paragraph (1)(A) of this subsection and the record of each survey required in paragraph (1)(F) of this subsection.

(ee) Decay-in-storage.

(1) The licensee may hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage and dispose of it without regard to its radioactivity if the licensee does the following:

(A) monitors radioactive material at the surface before disposal and determines that its radioactivity cannot be distinguished from the background radiation level with an appropriate radiation detection survey meter set on its most sensitive scale and with no interposed shielding; and

(B) removes or obliterates all radiation labels, except for radiation labels on materials that are within containers and that will be handled as biomedical waste after it has been released from the licensee.

(2) The licensee shall retain a record of each disposal as required by paragraph (1) of this subsection in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

- (A) date of the disposal;
- (B) manufacturer's name, model number and serial number of the survey instrument used;
- (C) background radiation level;
- (D) radiation level measured at the surface of each waste container; and
- (E) name of the individual who performed the survey.

(ff) Use of unsealed radioactive material for uptake, dilution, and excretion studies that do not require a written directive. Except for

quantities that require a written directive in accordance with subsection (t) of this section, a licensee may use any unsealed radioactive material prepared for medical or veterinary use for uptake, dilution, or excretion studies that meets the following:

(1) is obtained from:

(A) a manufacturer or preparer licensed in accordance with §289.252(r) [§289.252] of this title or equivalent NRC or agreement state requirements; or

(B) a PET radioactive drug producer licensed in accordance with §289.252(kk) of this title or equivalent NRC or agreement state requirements; or

(2) excluding production of PET radionuclides, prepared by:

(A) an authorized nuclear pharmacist; or

(B) a physician who is an authorized user and who meets the requirements specified in subsections (jj) or (nn) and (jj)(3)(A)(ii)(VII) [(jj)(1)(C)(ii)(VII)] of this section; or

(C) an individual under the supervision, as specified in subsection (s) of this section, of the authorized nuclear pharmacist in subparagraph (A) of this paragraph, or the physician who is an authorized user in subparagraph [subparagraphs (A) and] (B) of this paragraph; or

(3) is obtained from and prepared by an NRC or agreement state licensee for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an IND protocol accepted by the FDA; or

(4) is prepared by the licensee for use in research in accordance with a Radioactive Drug Research Committee-approved application or an IND protocol accepted by the FDA.

(gg) Training for uptake, dilution, and excretion studies. Except as provided in subsection (l) of this section, the licensee shall require an authorized user of unsealed radioactive material for the uses authorized in subsection (ff) of this section to be a physician who:

(1) is certified by a medical specialty board whose certification process has been recognized by the department [agency], the NRC or an agreement state [and who meets the requirements in paragraph (3)(C) of this subsection]. The [(The) names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]]. To have its certification recognized, a specialty board shall require all candidates for certification to:

(A) complete 60 hours of training and experience in basic radionuclide handling techniques and radiation safety applicable to the medical use of unsealed radioactive material for uptake, dilution, and excretion studies as described in [that includes the topics listed in] paragraph (3)(A) [and (B)] of this subsection; and

(B) pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in radiation safety, radionuclide handling, and quality control; or

(2) is an authorized user in accordance with subsections (jj) or (nn) of this section or equivalent NRC or agreement state requirements; or

(3) has completed 60 hours of training and experience, including a minimum of eight hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical

use of unsealed radioactive material for uptake, dilution, and excretion studies.

(A) The training and experience shall include the following:

(i) [(A)] classroom and laboratory training in the following areas:

(I) [(†)] radiation physics and instrumentation;

(II) [(††)] radiation protection;

(III) [(†††)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(††††)] chemistry of radioactive material for medical use; and

(V) [(†††††)] radiation biology; and

(ii) [(B)] work experience, under the supervision of an authorized user who meets the requirements of this subsection, subsections (l), (jj), or (nn) of this section, or equivalent NRC or agreement state requirements involving the following:

(I) [(†)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(II) [(††)] performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(III) [(†††)] calculating, measuring, and safely preparing patient or human research subject dosages;

(IV) [(††††)] using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(V) [(†††††)] using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and

(VI) [(††††††)] administering dosages of radioactive drugs to patients or human research subjects; and

(B) [(C)] has obtained written attestation that the individual has satisfactorily completed the requirements in subparagraph (A) of this paragraph and is able to independently fulfill the radiation safety-related duties as an authorized user for the medical uses authorized under subsection (ff) of this section. The attestation must be obtained from either:

(i) [; signed by] a preceptor authorized user who meets the requirements of [this] subsection (l) of this section, this subsection, or subsections [(4); (jj)] [(;)] or (nn) of this section, or equivalent NRC or agreement state requirements; or [;]

(ii) a residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsections (l), (gg), (jj), or (nn) of this section, or equivalent NRC or agreement state requirements, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in subparagraph (A) of this paragraph. [that the individual has satisfactorily completed the requirements of paragraph (1)(A) or (3) of this subsection and has achieved a level of competency sufficient

to function independently as an authorized user for the medical uses authorized in accordance with subsection (ff) of this section.]

(hh) Use of unsealed radioactive material for imaging and localization studies that do not require a written directive. Except for quantities that require a written directive in accordance with subsection (t) of this section, a licensee may use any unsealed radioactive material prepared for medical or veterinary use for imaging and localization studies that meets the following:

(1) is obtained from:

(A) a manufacturer or preparer licensed in accordance with §289.252(r) [§289.252] of this title or equivalent NRC or agreement state requirements; or

(B) a PET radioactive drug producer licensed in accordance with §289.252(kk) of this title or equivalent NRC or agreement state requirements; or

(2) excluding production of PET radionuclides, prepared by:

(A) an authorized nuclear pharmacist; or

(B) a physician who is an authorized user and who meets the requirements specified in subsections (jj) or (nn) and (jj)(3)(A)(ii)(VII) [(jj)(1)(C)(ii)(VII)] of this section; or

(C) an individual under the supervision, as specified in subsection (s) of this section, of ~~the [an]~~ authorized nuclear pharmacist in subparagraph (A) of this paragraph, or the physician who is an authorized user in subparagraph [subparagraphs (A) and] (B) of this paragraph; or

(3) is obtained from and prepared by an NRC or agreement state licensee for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an IND protocol accepted by the FDA; or

(4) is prepared by the licensee for use in research in accordance with a Radioactive Drug Research Committee-approved application or an IND protocol accepted by the FDA.

(ii) Permissible molybdenum-99, strontium-82, and strontium-85 concentrations.

(1) The licensee may not administer to humans a radiopharmaceutical that contains:

(A) more than 0.15 μCi of molybdenum-99 per mCi of technetium-99m (0.15 kilobecquerel (kBq) of molybdenum-99 per MBq of technetium-99m); or

(B) more than 0.02 μCi of strontium-82 per mCi of rubidium-82 chloride (0.02 kBq of strontium-82 per MBq of rubidium-82 chloride) injection; or

(C) more than 0.2 μCi of strontium-85 per mCi of rubidium-82 (0.2 kBq of strontium-85 per MBq of rubidium-82 chloride) injection.

(2) The licensee who uses molybdenum-99/technetium-99m generators for preparing a technetium-99m radiopharmaceutical shall measure the molybdenum-99 concentration in each [of the first] eluate from [after receipt of] a generator to demonstrate compliance with paragraph (1) of this subsection.

(3) The licensee who uses a strontium-82/rubidium-82 generator for preparing a rubidium-82 radiopharmaceutical shall, before the first patient use of the day, measure the concentration of radionuclides strontium-82 and strontium-85 to demonstrate compliance with paragraph (1) of this subsection.

(4) If the licensee is required to measure the molybdenum-99 or strontium-82 and strontium-85 concentrations, the licensee shall retain a record of each measurement in accordance with subsection (www) of this section for inspection by the department [agency]. The record shall include the following:

(A) for each measured elution of technetium-99m:

(i) the ratio of the measures expressed as μCi of molybdenum-99 per mCi of technetium-99m (kBq of molybdenum-99 per MBq of technetium-99m);

(ii) time and date of the measurement; and

(iii) name of the individual who made the measurement.

(B) for each measured elution of rubidium-82:

(i) the ratio of the measures expressed as μCi of strontium-82 per mCi of rubidium (kBq of strontium-82 per MBq of rubidium-82);

(ii) the ratio of the measures expressed as μCi of strontium-85 per mCi of rubidium (kBq of strontium-85 per MBq of rubidium-82);

(iii) time and date of the measurement; and

(iv) name of the individual who made the measurement.

(5) The licensee shall report any measurement that exceeds the limits in paragraph (1) of this subsection at the time of generator elution, in accordance with subsection (xxx) of this section.

(jj) Training for imaging and localization studies. Except as provided in subsection (l) of this section, the licensee shall require an authorized user of unsealed radioactive material for the uses authorized in subsection (hh) of this section to be a physician who:

(1) is certified by a medical specialty board whose certification process has been recognized by the department [agency], the NRC or an agreement state [and who meets the requirements of paragraph (3)(C) of this subsection]. The [(The)] names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]. To have its certification process recognized, a specialty board shall require all candidates for certification to:

(A) complete 700 hours of training and experience in basic radionuclide handling techniques and radiation safety applicable to the medical use of unsealed radioactive material for imaging and localization studies as described [that includes the topics listed] in paragraph (3) of this subsection; and

(B) pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in radiation safety, radionuclide handling, and quality control; or

(2) is an authorized user in accordance with subsection (nn) of this section and meets the requirements of paragraph (3)(A)(ii)(VII) [(3)(B)(viii)] of this subsection or equivalent NRC or agreement state requirements; or

(3) has completed 700 hours of training and experience, including a minimum of 80 hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical use of unsealed radioactive material for imaging and localization studies.

(A) The training and experience shall include the following: []

(i) [(A)] classroom and laboratory training in the following areas:

(I) [(i)] radiation physics and instrumentation;

(II) [(ii)] radiation protection;

(III) [(iii)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(iv)] chemistry of radioactive material for medical use; and

(V) [(v)] radiation biology; and

(ii) [(B)] work experience under the supervision of an authorized user who meets the requirements in subsection (l) of this section, this subsection, or paragraph (3)(A)(ii)(VII) of this section [or clause (vii) of this subparagraph], and subsection (nn) of this section, or equivalent NRC or agreement state requirements. An authorized nuclear pharmacist who meets the requirements in subsections (k) or (l) of this section may provide the supervised work experience for subclause (VII) of this clause. Work experience must involve [involving] the following:

(I) [(i)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(II) [(ii)] performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(III) [(iii)] calculating, measuring, and safely preparing patient or human research subject dosages;

(IV) [(iv)] using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(V) [(v)] using procedures to contain spilled radioactive material safely and using proper decontamination procedures;

(VI) [(vi)] administering dosages of radioactive drugs to patients or human research subjects; and

(VII) [(vii)] eluting generator systems appropriate for preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclide purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs; and

(B) [(C)] has obtained written attestation that the individual has satisfactorily completed the requirements in this paragraph and is able to independently fulfill the radiation safety-related duties as an authorized user for the medical uses authorized under subsections (ff) and (hh) of this section. The attestation must be obtained from either:

(i) [signed by] a preceptor authorized user who meets the requirements of subsection (l) of this section, this subsection or paragraph (3)(A)(ii)(VII) [(3)(B)(vii)] of this subsection and subsection (nn) of this section or equivalent NRC or agreement state requirements; or

(ii) a residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsections (l), or (jj), or (nn) of this section and paragraph (3)(A)(ii)(VII) of this subsection, or

equivalent NRC or agreement state requirements, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in this paragraph. [; that the individual has satisfactorily completed the requirements of paragraph (1)(A) or (3)(A) and (B) of this subsection and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized in accordance with subsections (ff) and (hh) of this section.]

(kk) Use of unsealed radioactive material that requires a written directive. A licensee may use any unsealed radioactive material identified in subsection (nn)(2)(A)(ii)(VI) of this section prepared for medical use that requires a written directive that meets the following:

(1) is obtained from:

(A) a manufacturer or preparer licensed in accordance with §289.252(r) [§289-252] of this title or equivalent NRC or agreement state requirements;

(B) a PET radioactive drug producer licensed in accordance with §289.252(kk) of this title or equivalent NRC or agreement state requirements; or

(2) excluding production of PET radionuclides, prepared by:

(A) an authorized nuclear pharmacist; or

(B) a physician who is an authorized user and who meets the requirements specified in subsections (jj) or (nn) of this section; or

(C) an individual under the supervision, as specified in subsection (s) of this section, of the authorized nuclear pharmacist in subparagraph (A) of this paragraph, or the physician who is an authorized user in subparagraph [subparagraphs (A) and] (B) of this paragraph; or

(3) is obtained from and prepared by an NRC or agreement state licensee for use in research in accordance with an IND protocol accepted by the FDA; or

(4) is prepared by the licensee for use in research in accordance with an IND protocol accepted by the FDA.

(II) Safety instruction to personnel.

(1) The licensee shall provide radiation safety instruction, initially and at least annually, to personnel caring for patients or human or animal research subjects who cannot be released in accordance with subsection (cc) of this section. The instruction shall be appropriate to the personnel's assigned duties and include the following:

(A) patient or human or animal research subject control; and

(B) visitor control to include the following:

(i) routine visitation to hospitalized individuals or animals in accordance with §289.202(n) of this title;

(ii) contamination control;

(iii) waste control; and

(iv) notification of the RSO, or his or her designee, and an authorized user if the patient or the human or animal research subject has a medical emergency or dies.

(2) The licensee shall maintain a record for inspection by the department [agency], in accordance with subsection (xxx) [(www)] of this section, of individuals receiving instruction. The record shall include the following:

- (A) list of the topics covered;
- (B) date of the instruction or training;
- (C) name(s) of the attendee(s); and
- (D) name(s) of the individual(s) who provided the instruction.

(mm) Safety precautions. For each human patient or human research subject who cannot be released in accordance with subsection (cc) of this section, the licensee shall do the following:

(1) provide a private room with a private sanitary facility;

or

(2) provide a room with a private sanitary facility with another individual who also has received therapy with an unsealed radioactive material and who also cannot be released in accordance with subsection (cc) of this section;

(3) post the patient's or the research subject's room with a "Radioactive Materials" sign and note on the door and in the patient's or research subject's chart where and how long visitors may stay in the patient's or the research subject's room; and

(4) either monitor material and items removed from the patient's or the research subject's room to determine that their radioactivity cannot be distinguished from the natural background radiation level with a radiation detection survey instrument set on its most sensitive scale and with no interposed shielding, or handle such material and items as radioactive waste; and

(5) notify the RSO, or his or her designee, and the authorized user immediately if the patient or research subject has a medical emergency or dies.

(nn) Training for use of unsealed radioactive material that requires a written directive. Except as provided in subsection (l) of this section, the licensee shall require an authorized user of unsealed radioactive material for the uses authorized in subsection (kk) of this section to be a physician who:

(1) is certified by a medical specialty board whose certification process has been recognized by the department [agency], the NRC, or an agreement state and who meets the requirements in paragraph (2)(A)(ii)(V) of [(2)(B)(vi) and (C)] this subsection. The names of board certifications that [(Specialty boards whose certification processes] have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]. To be recognized, a specialty board shall require all candidates for certification to:

(A) successfully complete residency training in a radiation therapy or nuclear medicine training program or a program in a related medical specialty. These residency training programs shall include 700 hours of training and experience as described in paragraph (2)(A)(i) - (2)(A)(ii)(V) [(2)(A) - (B)(v)] of this subsection. Eligible training programs shall be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education, the Royal College of Physicians and Surgeons of Canada, or the Committee on Post-Graduate Training of the American Osteopathic Association; and

(B) pass an examination, administered by diplomates of the specialty board, which tests knowledge and competence in radiation safety, radionuclide handling, quality assurance, and clinical use of unsealed radioactive material for which a written directive is required; or

(2) has completed 700 hours of training and experience, including a minimum of 200 hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical use of unsealed radioactive material requiring a written directive.

(A) The training and experience shall include the following.

(i) [(A)] classroom and laboratory training in the following areas:

(I) [(i)] radiation physics and instrumentation;

(II) [(ii)] radiation protection;

(III) [(iii)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(iv)] chemistry of radioactive material for medical use; and

(V) [(v)] radiation biology; and

(ii) [(B)] work experience, under the supervision of an authorized user who meets the requirements of subsection (l) of this section, this subsection or equivalent NRC or agreement state requirements. A supervising authorized user, who meets the requirements of this paragraph shall also have experience in administering dosages in the same dosage category or categories (i.e. subclause (VI) of this [for example, in accordance with] clause [(vi) of this subparagraph]) as the individual requesting authorized user status. The work experience shall involve the following:

(I) [(i)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(II) [(ii)] performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(III) [(iii)] calculating, measuring, and safely preparing patient or human research subject dosages;

(IV) [(iv)] using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(V) [(v)] using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and

(VI) [(vi)] administering dosages of radioactive drugs to patients or human research subjects from the three categories in the following items. Radioactive drugs containing radionuclides in categories not included in this paragraph are regulated under subsection (q) of this section. This work experience must involve [involving] a minimum of three cases in each of the following categories for which the individual is requesting authorized user status:

(-a-) [(A)] oral administration of less than or equal to 33 mCi (1.22 GBq) of sodium iodide I-131, for which a written directive is required;

(-b-) [(B)] oral administration of greater than 33 mCi (1.22 GBq) of sodium iodide I-131 (experience with at least three cases in this item [subclause] also satisfies the requirement of item (-a-) of this subclause [(A) of this clause]; and

~~(-c-) [(H)]~~ parenteral administration of any radioactive drug that contains a [beta emitter or a photon-emitting] radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy of [with a photon energy] less than 150 kiloelectron volts (keV) for which a written directive is required; and [and/or]

~~[(H)]~~ parenteral administration of any other radionuclide for which a written directive is required; and]

~~(B) [(C)]~~ has obtained written attestation that the individual has satisfactorily completed the requirements of paragraph (2)(A) [paragraphs (1)(A) and (2)(B)(vi) or (2)] of this subsection, and is able to independently fulfill the radiation safety-related duties as an authorized user for the medical uses authorized under subsection (kk) of this section for which the individual is requesting authorized user status. The attestation must be obtained from either: [has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized in accordance with subsection (kk) of this section. The written attestation shall be signed by]

~~(i)~~ a preceptor authorized user who meets the requirements of subsection (l) of this section, this subsection or equivalent NRC or agreement state requirements and has [- The preceptor authorized user who meets the requirements in paragraph (2) of this subsection shall have] experience in administering dosages in the same dosage category or categories [for example, in accordance with paragraph (2)(B)(vi) of this subsection] as the individual requesting authorized user status; or [-]

~~(ii)~~ A residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsections (l) or (nn) of this section, or equivalent NRC or agreement state requirements, has experience in administering dosages in the same dosage category or categories as the individual requesting authorized user status, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in this paragraph.

~~(oo)~~ Training for the oral administration of sodium iodide I-131 requiring a written directive in quantities less than or equal to 33 mCi (1.22 GBq). Except as provided in subsection (l) of this section, the licensee shall require an authorized user for the oral administration of sodium iodide I-131 requiring a written directive in quantities less than or equal to 33 mCi (1.22 GBq) to be a physician who:

(1) is certified by a medical specialty board whose certification process includes all of the requirements of paragraph (3)(A) [and (B)] of this subsection and whose certification has been recognized by the department [agency], the NRC, or an agreement state [and who meets the requirements in paragraph (3)(C) of this subsection]. The [(The)] names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nre.gov/materials/miau/med-use-toolkit/spee-board-cert.html>]; or

(2) is an authorized user in accordance with subsection (nn) of this section for uses listed in subsection (nn)(2)(A)(ii)(VI)(-a-) or (-b-) [(nn)(2)(B)(vi)(I) or (H)] of this section, or subsection (pp) of this section, or equivalent NRC or agreement state requirements; or

(3) has successfully completed 80 hours of classroom and laboratory training and work experience applicable to the medical use of sodium iodide I-131 for procedures requiring a written directive.

(A) The training and experience shall include the following.

(i) [(A)] classroom and laboratory training shall include the following:

(I) [(i)] radiation physics and instrumentation;

(II) [(ii)] radiation protection;

(III) [(iii)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(iv)] chemistry of radioactive material for medical use; and

(V) [(v)] radiation biology; and

(ii) [(B)] work experience, under the supervision of an authorized user who meets the requirements of subsection (l) of this section, this subsection, subsection (nn) or subsection (pp) of this section, or equivalent NRC or agreement state requirements. A supervising authorized user who meets the requirements in subsection (nn)(2) of this section, shall also have experience in administering dosages as specified in subsection (nn)(2)(A)(ii)(VI)(-a-) or (-b-) [(nn)(2)(B)(vi)(I) or (H)] of this section. The work experience shall involve the following:

(I) [(i)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(II) [(ii)] performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(III) [(iii)] calculating, measuring, and safely preparing patient or human research subject dosages;

(IV) [(iv)] using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(V) [(v)] using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and

(VI) [(vi)] administering dosages of radioactive drugs to patients or human research subjects that includes at least three cases involving the oral administration of less than or equal to 33mCi (1.22 GBq) of sodium iodide I-131; and

(B) [(C)] has obtained written attestation that the individual has satisfactorily completed the requirements of paragraph (3)(A) of this subsection [subparagraphs (A) and (B) of this paragraph], and is able to independently fulfill the radiation safety-related duties as an authorized user for oral administration of less than or equal to 33 mCi (1.22 GBq) of sodium iodide I-131 for medical uses authorized under subsection (kk) of this section. The attestation must be obtained from either: [has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized in accordance with subsection (kk) of this section. The written attestation shall be signed by]

(i) a preceptor authorized user who meets the requirements of subsection (l) of this section, this subsection, subsection (nn) or subsection (pp) of this section or equivalent NRC or agreement state requirements and has [- A preceptor authorized user, who meets the requirements in subsection (nn)(2) of this section

shall also have] experience in administering dosages as specified in subsection (nn)(2)(A)(ii)(VI)(-a-) or (-b-) [~~(nn)(2)(B)(vi)(H)~~ or ~~(H)~~] of this section; or [-]

(ii) a residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsections (l), (nn), (oo) or (pp) of this section, or equivalent NRC or agreement state requirements, has experience in administering dosages as specified in subsection (nn)(2)(A)(ii)(VI)(-a-) or (-b-), and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in this paragraph.

(pp) Training for the oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 33 mCi (1.22 GBq). Except as provided in subsection (l) of this section, the licensee shall require an authorized user for the oral administration of sodium iodide I-131 requiring a written directive in quantities greater than 33 mCi (1.22 GBq) to be a physician who:

(1) is certified by a medical specialty board whose certification process includes all of the requirements in paragraph (3)(A) [~~and (B)~~] of this subsection and whose certification has been recognized by the department [agency], the NRC, or an agreement state [~~and who meets the requirements in paragraph (3) of this subsection~~]. The [~~The~~] names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]; or

(2) is an authorized user in accordance with subsection (nn) of this section or equivalent NRC or agreement state requirements for uses listed in subsection (nn)(2)(A)(ii)(VI)(-b-) [~~(nn)(2)(B)(vi)(H)~~] of this section; or

(3) has training and experience including, successful completion of 80 hours of classroom and laboratory training applicable to the medical use of sodium iodide I-131 for procedures requiring a written directive.

(A) The training and experience shall include the following.

(i) [(A)] classroom and laboratory training shall include the following:

(I) [(+)] radiation physics and instrumentation;

(II) [(+)] radiation protection;

(III) [(+)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(+)] chemistry of radioactive material for medical use; and

(V) [(+)] radiation biology; and

(ii) [(B)] work experience, under the supervision of an authorized user who meets the requirements of subsection (l) of this section, subsections (nn) or (pp) of this section or equivalent NRC or agreement state requirements. A supervising authorized user who meets the requirements of subsection (nn)(2) of this section, shall also have experience in administering dosages as specified in subsection

(nn)(2)(A)(ii)(VI)(-b-) [~~(nn)(2)(B)(vi)(H)~~] of this section. The work experience shall involve the following:

(I) [(+)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(II) [(+)] performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(III) [(+)] calculating, measuring, and safely preparing patient or human research subject dosages;

(IV) [(+)] using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(V) [(+)] using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and

(VI) [(+)] administering dosages of radioactive drugs to patients or human research subjects that includes at least three cases involving the oral administration of greater than 33 mCi (1.22 GBq) of sodium iodide I-131; and

(B) [(C)] has obtained written attestation that the individual has satisfactorily completed the requirements of paragraph (3)(A) of this subsection [subparagraphs (A) and (B) of this paragraph], and is able to independently fulfill the radiation safety-related duties as an authorized user for oral administration of greater than 33 mCi (1.22 GBq) of sodium iodide I-131 for medical uses authorized under subsection (kk) of this section. The attestation must be obtained from either: [has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized in accordance with subsection (kk) of this section. The written attestation shall be signed by]

(i) a preceptor authorized user who meets the requirements in subsections [subsection] (l) or (nn) of this section, this subsection, [or subsection (nn) of this section] or equivalent NRC or agreement state requirements, and has [- The preceptor authorized user, who meets the requirements in subsection (nn)(2) of this section, shall also have] experience in administering dosages as specified in subsection (nn)(2)(A)(ii)(VI)(-b-) [~~(nn)(2)(B)(vi)(H)~~] of this section; or [-]

(ii) a residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsections (l), (nn), or (pp) of this section, or equivalent NRC, or agreement state requirements, has experience in administering dosages as specified in subsection (nn)(2)(A)(ii)(VI)(-b-) of this section, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in this paragraph.

(qq) Training for the parenteral administration of unsealed radioactive material requiring a written directive.

(l) Except as provided in subsection (l) of this section, the licensee shall require an authorized user for the parenteral administration of unsealed radioactive materials requiring a written directive to be a physician who:

(A) [(4)] is an authorized user in accordance with subsection (nn) of this section for uses listed in subsection (nn)(2)(A)(ii)(VI)(c-) [(nn)(2)(B)(vi)(III) or (IV)] of this section or equivalent NRC or agreement state requirements; or

(B) [(2)] is an authorized user under subsections (zz) or (ttt) of this section or equivalent NRC or agreement state requirements and who meets the requirements of paragraph (2) [(4)] of this subsection; or

(C) [(3)] is certified by a medical specialty board whose certification process has been recognized by the department [agency], the NRC, or an agreement state in accordance with subsections (zz) or (ttt) of this section, and who meets the requirements of paragraph (2) [(4)] of this section. [The names of board certifications which have been recognized by the agency, the NRC, or an agreement state appear on the NRC's web page at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>; and]

(2) The physician must also meet the following requirements:

(A) [(4)] has successfully completed [training and experience including] 80 hours of classroom and laboratory training applicable to parenteral administrations listed in subsection (nn)(2)(A)(ii)(VI)(c-) of this section. [requiring a written directive, of any beta emitting radionuclide or any photon-emitting radionuclide with a photon energy less than 150 keV, and/or parenteral administration of any other radionuclide for which a written directive is required.]

(B) has the [The] training and experience that shall include the following: [-]

(i) [(A)] classroom and laboratory training shall include the following:

(I) [(i)] radiation physics and instrumentation;

(II) [(ii)] radiation protection;

(III) [(iii)] mathematics pertaining to the use and measurement of radioactivity;

(IV) [(iv)] chemistry of radioactive material for medical use; and

(V) [(v)] radiation biology; and

(ii) [(B)] work experience, under the supervision of an authorized user who meets the requirements of subsection (l) of this section, this subsection or subsection (nn) of this section or equivalent NRC or agreement state requirements in the parenteral administration listed in subsection (nn)(2)(A)(ii)(VI)(c-) of this section. [; for which a written directive is required, of any beta emitter or any photon-emitting radionuclide with a photon energy less than 150 keV, and/or parenteral administration of any other radionuclide for which a written directive is required.] A supervising authorized user who meets the requirements of subsection (nn) of this section, this subsection, or equivalent NRC or agreement state requirements shall have experience in administering dosages in the same category or categories as the individual requesting authorized user status. [as specified in subsection (nn)(2)(B)(vi)(III) and/or (IV) of this section.] The work experience shall involve the following:

(I) [(i)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(II) [(ii)] performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(III) [(iii)] calculating, measuring, and safely preparing patient or human research subject dosages;

(IV) [(iv)] using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(V) [(v)] using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and

(VI) [(vi)] administering dosages to patients or human research subjects that include at least three cases involving the parenteral administration specified in subsection (nn)(2)(A)(ii)(VI)(c-) of this section [; for which a written directive is required, of any beta emitter or any photon-emitting radionuclide with a photon energy less than 150 keV and/or at least three cases involving the parenteral administration of any other radionuclide, for which a written directive is required]; and

(C) has obtained written attestation that the individual has satisfactorily completed the requirements of paragraph (2)(A) and (B) [paragraphs (2) or (3)] of this subsection, and is able to independently fulfill the radiation safety-related duties as an authorized user for the parenteral administration of unsealed radioactive material requiring a written directive. The attestation must be obtained from either: [has achieved a level of competency sufficient to function independently as an authorized user for the parenteral administration of unsealed radioactive materials requiring a written directive. The written attestation shall be signed by]

(i) a preceptor authorized user who meets the requirements of subsection (l) of this section, [this subsection or] subsection (nn) of this section, or this subsection, or equivalent NRC or agreement state requirements. A preceptor authorized user who meets the requirements in subsection (nn) of this section, or equivalent Agreement State requirements, must have experience in administering dosages in the same category or categories as the individual requesting authorized user status; or, and [A preceptor authorized user, who meets the requirements of subsection (nn) of this section] shall have experience in administering dosages in the same category or categories as the individual requesting authorized user status; or [as specified in subsection (nn)(2)(B)(vi)(III) and/or (IV) of this section.]

(ii) A residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsections (l), (nn) or (qq) of this section, or equivalent NRC or agreement state requirements, has experience in administering dosages in the same dosage category or categories as the individual requesting authorized user status, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in this paragraph.

(rr) Use of sealed sources for manual brachytherapy. The licensee shall use only brachytherapy [sealed] sources [for therapeutic medical uses] as follows:

(1) as approved in the Sealed Source and Device Registry for manual brachytherapy medical use. The manual brachytherapy sources may be used for manual brachytherapy uses that are not explicitly listed in the Sealed Source and Device Registry, but must be

used in accordance with the radiation safety conditions and limitations described in the Sealed Source and Device Registry; or

(2) in research to deliver therapeutic doses for medical use in accordance with an active Investigational Device Exemption application accepted by the FDA provided the requirements of subsection (u)(1) of this section are met [and as approved by the agency].

(ss) Surveys after sealed source implants and removal.

(1) Immediately after implanting sealed sources in a patient or a human or animal research subject, the licensee shall perform a survey to locate and account for all sealed sources that have not been implanted.

(2) Immediately after removing the last temporary implant sealed source from a patient or a human or animal research subject, the licensee shall perform a survey of the patient or the human or animal research subject with a radiation detection survey instrument to confirm that all sealed sources have been removed.

(3) A record of each survey shall be retained, for inspection by the department [agency], in accordance with subsection (xxx) [(www)] of this section. The record shall include the following:

(A) date of the survey;

(B) results of the survey;

(C) manufacturer's name and model and serial number of the instrument used to make the survey; and

(D) name of the individual who performed the survey.

(tt) Brachytherapy sealed sources accountability.

(1) The licensee shall maintain accountability at all times for all brachytherapy sealed sources in storage or use.

(2) Promptly after removing sealed sources from a patient or a human or animal research subject, the licensee shall return brachytherapy sealed sources to a secure storage area.

(3) The licensee shall maintain a record of the brachytherapy sealed source accountability in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency].

(A) When removing temporary implants from storage, the licensee shall record the number and activity of sources, time and date the sources were removed, the name of the individual who removed the sources, and the location of use. When temporary implants are returned to storage, record the number and activity of sources, the time and date, and the name of the individual who returned them.

(B) When removing permanent implants from storage, the licensee shall record the number and activity of sources, date, the name of the individual who removed the sources, and the number and activity of sources permanently implanted in the patient or human research subject. Record the number and activity of sources not implanted and returned to storage, the date, and the name of the individual who returned them to storage.

(uu) Safety instruction to personnel. The licensee shall provide radiation safety instruction, initially and at least annually, to personnel caring for patients or human or animal research subjects who are receiving brachytherapy and who cannot be released in accordance with subsection (cc) of this section or animals that are confined.

(1) The instruction shall be appropriate to the personnel's assigned duties and include the following:

(A) size and appearance of brachytherapy sources;

(B) safe handling and shielding instructions;

(C) patient or human research subject control;

(D) visitor control to include visitation to hospitalized individuals in accordance with §289.202(n) of this title; and

(E) notification of the RSO, or his or her designee, and an authorized user if the patient or the human or animal research subject has a medical emergency or dies.

(2) A licensee shall maintain a record, for inspection by the department [agency], in accordance with subsection (xxx) [(www)] of this section, of individuals receiving instruction. The record shall include the following:

(A) list of the topics covered;

(B) date of the instruction or training;

(C) name(s) of the attendee(s); and

(D) name(s) of the individual(s) who provided the instruction.

(vv) Safety precautions for the use of brachytherapy.

(1) For each patient or human research subject who is receiving brachytherapy and cannot be released in accordance with subsection (cc) of this section the licensee shall:

(A) provide a private room with a private sanitary facility;

(B) post the patient's or the research subject's room with a "Radioactive Materials" sign and note on the door or in the patient's or research subject's chart where and how long visitors may stay in the patient's or the research subject's room; and

(C) have available near each treatment room applicable emergency response equipment to respond to a sealed source that is inadvertently dislodged from the patient or inadvertently lodged within the patient following removal of the sealed source applicators.

(2) The RSO, or his or her designee, and the authorized user shall be notified if the patient or research subject has a medical emergency and, immediately, if the patient dies.

(ww) Calibration measurements of brachytherapy sealed sources.

(1) Before [Prior to] the first medical use of a brachytherapy sealed source on or after October 1, 2000, the licensee shall do the following:

(A) determine the sealed source output or activity using a dosimetry system that meets the requirements of subsection (iii)(1) of this section;

(B) determine sealed source positioning accuracy within applicators; and

(C) use published protocols accepted by nationally recognized bodies to meet the requirements of subparagraphs (A) and (B) of this paragraph.

(2) Instead of the licensee making its own measurements as required in paragraph (1) of this subsection, the licensee may use measurements provided by the source manufacturer or by a calibration laboratory accredited by the American Association of Physicists in Medicine that are made in accordance with paragraph (1) of this subsection.

(3) The licensee shall mathematically correct the outputs or activities determined in paragraph (1) of this subsection for physical decay at intervals consistent with one percent [±.0%] physical decay.

(4) The licensee shall retain a record of each calibration in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

(A) complete date of the calibration including the month, day, and year;

(B) manufacturer's name and model and serial number for the sealed source and instruments used to calibrate the sealed source;

(C) sealed source output or activity;

(D) sealed source positioning accuracy within applicators; and

(E) name of the individual, the source manufacturer, or the calibration laboratory that performed the calibration.

(xx) Strontium-90 sources for ophthalmic treatments. [Decay of strontium-90 sources for ophthalmic treatments.]

(1) A licensee who uses strontium-90 for ophthalmic treatments must ensure that certain activities as specified in paragraph (2) of this subsection are performed by either:

(A) an authorized medical physicist; or

(B) an individual who:

(i) is identified as an ophthalmic physicist on a specific medical use license issued by the department, the NRC, or an agreement state; permit issued by the department, the NRC, or an agreement state broad scope medical use licensee; medical use permit issued by an NRC master material licensee; or permit issued by an NRC master material licensee broad scope medical use permittee; and

(ii) holds a master's or doctor's degree in physics, medical physics, other physical sciences, engineering, or applied mathematics from an accredited college or university; and

(iii) has successfully completed one year of full-time training in medical physics and an additional year of full-time work experience under the supervision of a medical physicist; and

(iv) has documented training in:

(I) the creation, modification, and completion of written directives;

(II) procedures for administrations requiring a written directive; and

(III) performing the calibration measurements of brachytherapy sources as detailed in subsection (ww) of this section.

(2) The individual who is identified in paragraph (1) of this subsection must:

(A) calculate the activity of each strontium-90 source that is used to determine the treatment times for ophthalmic treatments, and the decay must be based on the activity determined under subsection (ww) of this section; and

(B) assist the licensee in developing, implementing, and maintaining written procedures to provide high confidence that the administration is in accordance with the written directive. These procedures must include the frequencies that the individual meeting the requirements in paragraph (1) of this subsection will observe treatments, review the treatment methodology, calculate treatment time for the prescribed dose, and review records to verify that the administrations were in accordance with the written directives.

~~[(1) Only an authorized medical physicist shall calculate the activity of each strontium-90 source that is used to determine the treatment times for ophthalmic treatments. The decay shall be based on the activity determined in accordance with subsection (ww) of this section.]~~

~~(3) [(2)] A licensee shall maintain a record of the activity of a strontium-90 source in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:~~

~~(A) date and initial activity of the source as determined under [in] subsection (ww) of this section; and~~

~~(B) for each decay calculation, the date and the source activity as determined under this [in] subsection [(ww) of this section].~~

~~(yy) Therapy-related computer systems for manual brachytherapy. The licensee shall perform acceptance testing on the treatment planning system of therapy-related computer systems in accordance with published protocols accepted by nationally recognized bodies. At a minimum, the acceptance testing shall include, as applicable, verification of the following:~~

~~(1) the sealed source-specific input parameters required by the dose calculation algorithm;~~

~~(2) the accuracy of dose, dwell time, and treatment time calculations at representative points;~~

~~(3) the accuracy of isodose plots and graphic displays; and~~

~~(4) the accuracy of the software used to determine radioactive sealed source positions from radiographic images.~~

~~(zz) Training for use of manual brachytherapy sealed sources. Except as provided in subsection (l) of this section, the licensee shall require an authorized user of a manual brachytherapy source for the uses authorized in subsection (tr) of this section to be a physician who:~~

~~(1) is certified by a medical specialty board whose certification process has been recognized by the department [agency], the NRC or an agreement state [and who meets the requirements of paragraph (2)(D) of this section]. The [(The) names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]]. To have its certification recognized, a specialty board shall require all candidates for certification to:~~

~~(A) successfully complete a minimum of three years of residency training in a radiation oncology program approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education, the Royal College of Physicians and Surgeons of Canada, or the Committee on Post-Graduate Training of the American Osteopathic Association; and~~

~~(B) pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in radiation safety, radionuclide handling, treatment planning, quality assurance, and clinical use of manual brachytherapy; or~~

~~(2) has completed:~~

~~(A) a structured educational program in basic radionuclide handling techniques applicable to the use of manual brachytherapy sources including the following:~~

~~(i) [(A)] 200 hours of classroom and laboratory training in the following areas:~~

- (I) [(+) radiation physics and instrumentation;
- (II) [(+)] radiation protection;
- (III) [(+)] mathematics pertaining to the use and measurement of radioactivity; and
- (IV) [(+)] radiation biology; and

(ii) [(B)] 500 hours of work experience, under the supervision of an authorized user who meets the requirements of subsection (l) of this section, this subsection, or equivalent NRC or agreement state requirements at a medical facility authorized to use radioactive material under subsection (rr) of this section [institution], involving the following:

- (I) [(+)] ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;
- (II) [(+)] checking survey meters for proper operation;
- (III) [(+)] preparing, implanting, and removing brachytherapy sources;
- (IV) [(+)] maintaining running inventories of material on hand;
- (V) [(+)] using administrative controls to prevent a medical event involving the use of radioactive material; and
- (VI) [(+)] using emergency procedures to control radioactive material; and

(B) [(C)] [completion of] three years of supervised clinical experience in radiation oncology, under an authorized user who meets the requirements of subsection (l) of this section, this subsection, or equivalent NRC or agreement state requirements, as part of a formal training program approved by the Residency Review Committee for Radiation Oncology of the Accreditation Council for Graduate Medical Education, the Royal College of Physicians and Surgeons of Canada, or the Committee on Postdoctoral Training of the American Osteopathic Association. This experience may be obtained concurrently with the supervised work experience required by subparagraph (A)(ii) [(B)] of this paragraph; and

(3) [(D)] has obtained written attestation that the individual has satisfactorily completed the requirements in paragraph (2) of this subsection and is able to independently fulfill the radiation safety-related duties as an authorized user of manual brachytherapy sources for the medical uses authorized under subsection (rr) of this section. The attestation must be obtained from either: [signed by]

(A) a preceptor authorized user who meets the requirements of subsection (l) of this section, this subsection, or equivalent NRC or agreement state requirements; or [; that the individual has satisfactorily completed the requirements of paragraph (1)(A) of this subsection or subparagraphs (A) - (C) of this paragraph and has achieved a level of competency sufficient to function independently as an authorized user of manual brachytherapy for the medical uses authorized in accordance with subsection (rr) of this section.]

(B) a residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsection (l) of this section, this subsection, or equivalent NRC or agreement state requirements, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the

Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in paragraph (2) of this subsection.

(aaa) Training for ophthalmic use of strontium-90. Except as provided in subsection (l) of this section, the licensee shall require an authorized user of strontium-90 for ophthalmic radiotherapy to be a physician who:

(1) is an authorized user under subsection (zz) of this section or equivalent NRC or agreement state requirements; or

(2) has completed 24 hours of classroom and laboratory training applicable to the medical use of strontium-90 for ophthalmic radiotherapy.

(A) The training shall include the following.

(i) [(A)] classroom training shall include the following:

- (I) [(+)] radiation physics and instrumentation;
- (II) [(+)] radiation protection;
- (III) [(+)] mathematics pertaining to the use and measurement of radioactivity; and
- (IV) [(+)] radiation biology; and

(ii) [(B)] supervised clinical training in ophthalmic radiotherapy under the supervision of an authorized user at a medical institution, clinic, or private practice that includes the use of strontium-90 for the ophthalmic treatment of five individuals. This supervised clinical training shall involve:

- (I) [(+)] examination of each individual to be treated;
- (II) [(+)] calculation of the dose to be administered;
- (III) [(+)] administration of the dose; and
- (IV) [(+)] follow-up and review of each individual's case history; and

(3) [(C)] has obtained written attestation, signed by a preceptor authorized user who meets the requirements of subsection (l) of this section, [this subsection or] subsection (zz) of this section or this subsection, or equivalent NRC or agreement state requirements, that the individual has satisfactorily completed the requirements of paragraph (2)(A) [this paragraph] of this subsection and is able to [has achieved a level of competency sufficient to function] independently fulfill the radiation safety-related duties as an authorized user of strontium-90 for ophthalmic use.

(bbb) Use of sealed sources and medical devices for diagnosis.

(1) The licensee shall use only sealed sources that are not in medical devices for diagnostic medical uses if the sealed sources are [as] approved in the Sealed Source and Device Registry for diagnostic medicine. The sealed sources may be used for diagnostic medical uses that are not explicitly listed in the Sealed Source and Device Registry but must be used in accordance with the radiation safety conditions and limitations described in the Sealed Source and Device Registry.

(2) The licensee must only use medical devices containing sealed sources for diagnostic medical uses if both the sealed sources and medical devices are approved in the Sealed Source and Device Registry for diagnostic medical uses. The diagnostic medical devices may be used for diagnostic medical uses that are not explicitly listed in the Sealed Source and Device Registry but must be used in accordance

with the radiation safety conditions and limitations described in the Sealed Source and Device Registry.

(3) Sealed sources and devices for diagnostic medical uses may be used in research in accordance with an active Investigational Device Exemption (IDE) application accepted by the FDA provided the requirements of subsection (u)(1) of this section are met.

(4) [(2)] The licensee shall ensure that [document that the service provider, who is performing] installation or [and source] exchange of [devices containing] sealed source(s) [of radioactive material] in medical imaging equipment is performed only by the manufacturer or persons specifically authorized to perform these services by the department, the NRC, or another agreement state. The licensee shall maintain a record for each installation or exchange [; has a specific license issued by the agency in accordance with §289.252(H) of this title. The documentation shall be maintained] for inspection by the department [agency] in accordance with subsection (xxx) [(www)] of this section. The record shall include the date, the installer's radioactive material license number, and the regulatory agency that issued the license to the installer.

(ccc) Training for use of sealed sources for diagnosis. Except as provided in subsection (l) of this section, the licensee shall require the authorized user of a diagnostic sealed source or [for use in] a device authorized in accordance with subsection (bbb) of this section to be a physician, dentist, or podiatrist who:

(1) is certified by a specialty board whose certification process includes all of the requirements of paragraphs (3) and (4) of this subsection and whose certification has been recognized by the department [agency], the NRC, or an agreement state. The [(The)] names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]; or

(2) is an authorized user for uses listed in subsection (hh) of this section or equivalent NRC or agreement state requirements; or

(3) [(2)] has completed eight hours of classroom and laboratory training in basic radionuclide [radioisotope] handling techniques specifically applicable to the use of the device. The training shall include:

- (A) radiation physics and instrumentation;
- (B) radiation protection;
- (C) mathematics pertaining to the use and measurement of radioactivity; and
- (D) radiation biology; and

(4) [(3)] has completed training in the use of the device for the uses requested.

(ddd) Use of a sealed source in a remote afterloader unit, teletherapy unit, or gamma stereotactic radiosurgery unit.

(1) The licensee shall only use sealed sources [in photon-emitting remote afterloader units, teletherapy units, or gamma stereotactic units for therapeutic medical uses as follows]:

(A) [(4)] as approved and as provided for in the Sealed Source and Device Registry in photon-emitting remote afterloader units, teletherapy units, or gamma stereotactic radiosurgery units to deliver therapeutic doses for medical uses; or

(B) [(2)] in research involving photon-emitting remote afterloader units, teletherapy units, or gamma stereotactic radiosurgery

units in accordance with an active IDE [Investigational Device Exemption (IDE)] application accepted by the FDA provided the requirements of subsection (u)(1) [(u)] of this section are met.

(2) A licensee shall use photon-emitting remote afterloader units, teletherapy units, or gamma stereotactic radiosurgery units:

(A) approved in the Sealed Source and Device Registry to deliver a therapeutic dose for medical use. These devices may be used for therapeutic medical treatments that are not explicitly provided for in the Sealed Source and Device Registry, but must be used in accordance with radiation safety conditions and limitations described in the Sealed Source and Device Registry; or

(B) in research in accordance with an active IDE application accepted by the FDA provided the requirements of subsection (u)(1) of this section are met.

(eee) Surveys of patients and human research subjects treated with a remote afterloader unit.

(1) Before releasing a patient or a human research subject from licensee control, the licensee shall perform a survey of the patient or the human research subject and the remote afterloader unit with a portable radiation detection survey instrument to confirm that the sealed source(s) has been removed from the patient or human research subject and returned to the safe shielded position.

(2) The licensee shall maintain a record of the surveys in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

- (A) date of the survey;
- (B) results of the survey;
- (C) manufacturer's name, model, and serial number of the survey instrument used; and
- (D) name of the individual who made the survey.

(fff) Installation, maintenance, adjustment, and repair.

(1) Only a person specifically licensed by the department [agency], the NRC, or an agreement state shall install, maintain, adjust, or repair a remote afterloader unit, teletherapy unit, or gamma stereotactic radiosurgery unit that involves work on the sealed source(s) shielding, the sealed source(s) driving unit, or other electronic or mechanical component that could expose the sealed source(s), reduce the shielding around the sealed source(s), or compromise the radiation safety of the unit or the sealed source(s).

(2) Except for low dose-rate remote afterloader units, only a person specifically licensed by the department [agency], the NRC, or an agreement state shall install, replace, relocate, or remove a sealed source or sealed source contained in other remote afterloader units, teletherapy units, or gamma stereotactic units.

(3) For a low dose-rate remote afterloader unit, only a person specifically licensed by the department [agency], the NRC, an agreement state, or an authorized medical physicist shall install, replace, relocate, or remove a sealed source(s) contained in the unit.

(4) The licensee shall maintain a record of the installation, maintenance, adjustment and repair done on remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. For each installation, maintenance, adjustment and repair, the record shall include the date, description of the service, and name(s) of the individual(s) who performed the work.

(ggg) Safety procedures and instructions for remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units.

(1) A licensee shall do the following:

(A) ~~[(1)]~~ secure the unit, the console, the console keys, and the treatment room when not in use or unattended;

(B) ~~[(2)]~~ permit only individuals approved by the authorized user, RSO, or authorized medical physicist to be present in the treatment room during treatment with the sealed source(s);

(C) ~~[(3)]~~ prevent dual operation of more than one radiation producing device in a treatment room if applicable; and

(D) ~~[(4)]~~ develop, implement, and maintain written procedures for responding to an abnormal situation when the operator is unable to place the sealed source(s) in the shielded position, or remove the patient or human research subject from the radiation field with controls from outside the treatment room. The procedures shall include the following ~~[and shall be physically located at the unit console]~~:

(i) ~~[(A)]~~ instructions for responding to equipment failures and the names of the individuals responsible for implementing corrective actions;

(ii) ~~[(B)]~~ the process for restricting access to and posting of the treatment area to minimize the risk of inadvertent exposure; and

(iii) ~~[(C)]~~ the names and telephone numbers of the authorized users, the authorized medical physicist, and the RSO to be contacted if the unit or console operates abnormally;

(2) A copy of the procedures required by paragraph (1)(D) of this subsection must be physically located at the unit console.

(3) ~~[(5)]~~ The licensee shall post instructions at the unit console to inform the operator of the following:

(A) the location of the procedures required by paragraph (1)(D) [paragraph (4)] of this subsection; and

(B) the names and telephone numbers of the authorized users, the authorized medical physicist, and the RSO to be contacted if the unit or console operates abnormally. ~~;~~

(4) Before the first use for patient treatment of a new unit or an existing unit with a manufacturer upgrade that affects the operation and safety of the unit:

(A) a licensee shall ensure that vendor operational and safety training is provided to all individuals who will operate the unit. The vendor operational and safety training must be provided by the device manufacturer or by an individual certified by the device manufacturer to provide the operational and safety training.

(B) ~~[(6)]~~ a licensee shall provide operational and safety instructions [instruction] initially and at least annually, to all individuals who operate the unit at the facility, as appropriate to the individual's assigned duties, to include:

(i) ~~[(A)]~~ procedures identified in paragraph (1)(D) ~~[(4)]~~ of this subsection; and

(ii) ~~[(B)]~~ operating procedures for the unit. ~~;~~

(5) ~~[(7)]~~ A licensee shall ensure that operators, authorized medical physicists, and authorized users participate in drills of the emergency procedures, initially and at least annually; and

(6) A licensee shall maintain records of the procedures required by paragraphs (1)(D) and (4)(B)(ii) of this subsection in accor-

dance with subsection (xxx) of this section for inspection by the department.

(7) ~~[(8)]~~ A licensee shall maintain records of individuals receiving instruction and participating in drills required by paragraphs (4) and (5) ~~[(6) and (7)]~~ of this subsection in accordance with subsection (xxx) ~~[(www)]~~ of this section for inspection by the department [agency]. The record shall include the following:

(A) a list of the topics covered;

(B) date of the instruction or drill;

(C) name(s) of the attendee(s); and

(D) name(s) of the individual(s) who provided the instruction.

(hhh) Safety precautions for remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units. The licensee shall do the following:

(1) control access to the treatment room by a door at each entrance;

(2) equip each entrance to the treatment room with an electrical interlock system that will do the following:

(A) prevent the operator from initiating the treatment cycle unless each treatment room entrance door is closed;

(B) cause the sealed source(s) to be shielded promptly when an entrance door is opened; and

(C) prevent the sealed source(s) from being exposed following an interlock interruption until all treatment room entrance doors are closed and the sealed source(s) "on-off" control is reset at the console;

(3) require any individual entering the treatment room to assure, through the use of appropriate radiation monitors, that radiation levels have returned to ambient levels;

(4) except for low-dose remote afterloader units, construct or equip each treatment room with viewing and intercom systems to permit continuous observation of the patient or the human research subject from the treatment console during irradiation;

(5) for licensed activities where sealed sources are placed within the patient's or human research subject's body, only conduct treatments that allow for expeditious removal of a decoupled or jammed sealed source;

(6) in addition to the requirements specified in paragraphs (1) - (5) of this subsection, require the following:

(A) for low dose-rate, medium dose-rate, and pulsed dose-rate remote afterloader units:

(i) an authorized medical physicist, and either an authorized user or a physician, under the supervision of an authorized user, who has been trained in the operation and emergency response for the unit, be physically present during the initiation of all patient treatments involving the unit; and

(ii) an authorized medical physicist, and either an authorized user or an individual, under the supervision of an authorized user, who has been trained to remove the sealed source applicator(s) in the event of an emergency involving the unit, be immediately available during continuation of all patient treatments involving the unit;

(B) for high dose-rate remote afterloader units:

(i) an authorized user and an authorized medical physicist be physically present during the initiation of all patient treatments involving the unit; and

(ii) an authorized medical physicist, and either an authorized user or a physician, under the supervision of an authorized user, who has been trained in the operation and emergency response for the unit, be physically present during continuation of all patient treatments involving the unit;

(C) for gamma stereotactic radiosurgery units and teletherapy units, require that an authorized user and an authorized medical physicist be physically present throughout all patient treatments involving gamma stereotactic radiosurgery units and teletherapy units; and

(D) notify the RSO, or his or her designee, and an authorized user as soon as possible, if the patient or human research subject has a medical emergency or dies; and

(7) have applicable emergency response equipment available near each treatment room to respond to a sealed source that remains in the unshielded position or lodges within the patient following completion of the treatment.

(iii) Dosimetry equipment.

(1) Except for low dose-rate remote afterloader sealed sources where the sealed source output or activity is determined by the manufacturer, the licensee shall have a calibrated dosimetry system available for use. To satisfy this requirement, one of the following two conditions shall be met: [-]

(A) ~~the~~ [The] system shall have been calibrated using a system or sealed source traceable to the National Institute of Standards and Technology (NIST) and published protocols accepted by nationally recognized bodies; or by a calibration laboratory accredited by the American Association of Physicists in Medicine (AAPM). The calibration shall have been performed within the previous two years and after any servicing that may have affected system calibration; or [-]

(B) ~~the~~ [The] system shall have been calibrated within the previous four years. Eighteen to 30 months after that calibration, the system shall have been intercompared with another dosimetry system that was calibrated within the past 24 months by NIST or by a calibration laboratory accredited by the AAPM. The results of the intercomparison shall have indicated that the calibration factor of the licensee's system had not changed by more than two percent [2.0%]. The licensee may not use the intercomparison result to change the calibration factor. When intercomparing dosimetry systems to be used for calibrating sealed sources for therapeutic unit, the licensee shall use a comparable unit with beam attenuators or collimators, as applicable, and sealed sources of the same radionuclide as the sealed source used at the licensee's facility.

(2) The licensee shall have available for use a dosimetry system for spot check output measurements, if such measurements are required by this section. To satisfy this requirement, the system may be compared with a system that has been calibrated in accordance with paragraph (1) of this subsection. This comparison shall have been performed within the previous year and after each servicing that may have affected system calibration. The spot check system may be the same system used to meet the requirements of paragraph (1) of this subsection.

(3) The licensee shall retain a record of each calibration, intercomparison, and comparison of dosimetry equipment in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

(A) complete date of the calibration including the month, day, and year;

(B) manufacturer's model and serial numbers of the instruments that were calibrated, intercompared, or compared;

(C) the correction factor that was determined from the calibration or comparison or the apparent correction factor that was determined from an intercomparison; and

(D) the names of the individuals who performed the calibration, intercomparison, or comparison.

(jjj) Full calibration measurements on teletherapy units.

(1) A licensee authorized to use a teletherapy unit for medical use shall perform full calibration measurements on each teletherapy unit as follows:

(A) before the first medical use of the unit; and

(B) before medical use under any of the following conditions:

(i) whenever spot check measurements indicate that the output differs by more than five percent [5.0%] from the output obtained at the last full calibration corrected mathematically for radioactive decay;

(ii) following replacement of the sealed source or following reinstallation of the teletherapy unit in a new location;

(iii) following any repair of the teletherapy unit that includes removal of the sealed source or major repair of the components associated with the sealed source exposure assembly; and

(C) at intervals not to exceed one year.

(2) Full calibration measurements shall include determination of the following:

(A) the output within plus or minus three percent [3.0%] for the range of field sizes and for the distance or range of distances used for medical use;

(B) the coincidence of the radiation field and the field indicated by the light beam localizing device;

(C) uniformity of the radiation field and its dependence on the orientation of the useful beam;

(D) timer accuracy and linearity over the range of use;

(E) "on-off" error; and

(F) the accuracy of all distance measuring and localization devices in medical use.

(3) The licensee shall use the dosimetry system described in subsection (iii)(1) of this section to measure the output for one set of exposure conditions. The remaining radiation measurements required in paragraph (2)(A) of this subsection may be made using a dosimetry system that indicates relative dose rates.

(4) The licensee shall make full calibration measurements required by paragraph (1) of this subsection in accordance with published protocols accepted by nationally recognized bodies.

(5) The licensee shall mathematically correct the outputs determined in paragraph (2)(A) of this subsection for physical decay at intervals not to exceed one month for cobalt-60, six months for cesium-137, or at intervals consistent with one percent [1.0%] decay for all other nuclides.

(6) Full calibration measurements required by paragraph (1) of this subsection and physical decay corrections required by paragraph (5) of this subsection shall be performed by an authorized medical physicist.

(7) The licensee shall retain a record of each calibration in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

(A) complete date of the calibration including the month, day, and year;

(B) manufacturer's name, model number and serial number of the teletherapy unit's sealed source and the instruments used to calibrate the unit;

(C) results and an assessment of the full calibrations; and

(D) signature of the authorized medical physicist who performed the full calibration.

(kkk) Full calibration measurements on remote afterloader units.

(1) A licensee authorized to use a remote afterloader for medical use shall perform full calibration measurements on each unit as follows:

(A) before the first medical use of the unit;

(B) before medical use under any of the following conditions:

(i) following replacement of the sealed source;

(ii) following reinstallation of the unit in a new location outside the facility; and

(iii) following any repair of the unit that includes removal of the sealed source or major repair of the components associated with the sealed source exposure assembly;

(C) at intervals not to exceed three months for high dose-rate, medium dose-rate, and pulsed dose-rate remote afterloader units with sealed sources whose half-life exceeds 75 days; and

(D) at intervals not to exceed one year for low dose-rate afterloader units.

(2) Full calibration measurements shall include, as applicable, determination of the following:

(A) the output within plus or minus five percent [5.0%];

(B) sealed source positioning accuracy to within plus or minus 1 millimeter (mm);

(C) sealed source retraction with backup battery upon power failure;

(D) length of the sealed source transfer tubes;

(E) timer accuracy and linearity over the typical range of use;

(F) length of the applicators; and

(G) function of the sealed source transfer tubes, applicators, and transfer tube-applicator interfaces.

(3) A licensee shall use the dosimetry system described in subsection (iii)(1) of this section to measure the output.

(4) A licensee shall make full calibration measurements required by paragraph (1) of this subsection in accordance with published protocols accepted by nationally recognized bodies.

(5) In addition to the requirements for full calibrations for low dose-rate remote afterloader units in paragraph (2) of this subsection, a licensee shall perform an autoradiograph of the sealed source(s) to verify inventory and sealed source(s) arrangement at intervals not to exceed three months.

(6) For low dose-rate remote afterloader units, a licensee may use measurements provided by the sealed source manufacturer that are made in accordance with paragraphs (1) - (5) of this subsection.

(7) The licensee shall mathematically correct the outputs determined in paragraph (2)(A) of this subsection for physical decay at intervals consistent with one percent [1.0%] physical decay.

(8) Full calibration measurements required by paragraph (1) of this subsection and physical decay corrections required by paragraph (7) of this subsection shall be performed by an authorized medical physicist.

(9) The licensee shall retain a record of each calibration in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

(A) complete date of the calibration including the month, day, and year;

(B) manufacturer's name, model number and serial number of the remote afterloader unit's sealed source, and the instruments used to calibrate the unit;

(C) results and an assessment of the full calibrations;

(D) signature of the authorized medical physicist of this section; and

(E) results of the autoradiograph required for low dose-rate remote afterloader unit.

(III) Full calibration measurements on gamma stereotactic radiosurgery units.

(1) A licensee authorized to use a gamma stereotactic radiosurgery unit for medical use shall perform full calibration measurements on each gamma stereotactic radiosurgery unit as follows:

(A) before the first medical use of the unit;

(B) before medical use under the following conditions:

(i) whenever spot check measurements indicate that the output differs by more than five percent [5.0%] from the output obtained at the last full calibration corrected mathematically for radioactive decay;

(ii) following replacement of the sealed sources or following reinstallation of the gamma stereotactic radiosurgery unit in a new location; and

(iii) following any repair of the gamma stereotactic radiosurgery unit that includes removal of the sealed sources or major repair of the components associated with the sealed source exposure assembly; and

(C) at intervals not to exceed one year, with the exception that relative helmet factors need only be determined before the first medical use of a helmet and following any damage to a helmet.

(2) Full calibration measurements shall include determination of the following:

- (A) the output within plus or minus three percent [3.0%];
- (B) relative helmet factors;
- (C) isocenter coincidence;
- (D) timer accuracy and linearity over the range of use;
- (E) "on-off" error;
- (F) trunnion centricity;
- (G) treatment table retraction mechanism, using backup battery power or hydraulic backups with the unit "off";
- (H) helmet microswitches;
- (I) emergency timing circuits; and
- (J) stereotactic frames and localizing devices (trunnions).

(3) The licensee shall use the dosimetry system described in subsection (iii)(1) of this section to measure the output for one set of exposure conditions. The remaining radiation measurements required in paragraph (2)(A) of this subsection may be made using a dosimetry system that indicates relative dose rates.

(4) The licensee shall make full calibration measurements required by paragraph (1) of this subsection in accordance with published protocols accepted by nationally recognized bodies.

(5) The licensee shall mathematically correct the outputs determined in paragraph (2)(A) of this subsection at intervals not to exceed one month for cobalt-60 and at intervals consistent with one percent [1.0%] physical decay for all other radionuclides.

(6) Full calibration measurements required by paragraph (1) of this subsection and physical decay corrections required by paragraph (5) of this subsection shall be performed by an authorized medical physicist.

(7) The licensee shall retain a record of each calibration in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

- (A) complete date of the calibration including the month, day and year;
- (B) manufacturer's name, model number, and serial number for the unit and the unit's sealed source and the instruments used to calibrate the unit;
- (C) results and an assessment of the full calibration; and
- (D) signature of the authorized medical physicist who performed the full calibration.

(mmm) Periodic spot checks for teletherapy units.

(1) A licensee authorized to use teletherapy units for medical use shall perform output spot checks on each teletherapy unit once in each calendar month that include determination of the following:

- (A) timer constancy and linearity over the range of use;
- (B) "on-off" error;
- (C) the coincidence of the radiation field and the field indicated by the light beam localizing device;
- (D) the accuracy of all distance measuring and localization devices used for medical use;

(E) the output for one typical set of operating conditions measured with the dosimetry system described in subsection (iii)(2) of this section; and

(F) the difference between the measurement made in subparagraph (E) of this paragraph and the anticipated output, expressed as a percentage of the anticipated output, the value obtained at last full calibration corrected mathematically for physical decay.

(2) The licensee shall perform measurements required by paragraph (1) of this subsection in accordance with written procedures established by an authorized medical physicist. That authorized medical physicist need not actually perform the spot check measurements. The licensee shall maintain a copy of the written procedures in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency].

(3) The licensee authorized to use a teletherapy unit for medical use shall perform safety spot checks of each teletherapy facility once in each calendar month and after each sealed source installation to assure proper operation of the following:

- (A) electrical interlocks at each teletherapy room entrance;
- (B) electrical or mechanical stops installed for the purpose of limiting use of the primary beam of radiation (restriction of sealed source housing angulation or elevation, carriage or stand travel and operation of the beam "on-off" mechanism);
- (C) sealed source exposure indicator lights on the teletherapy unit, on the control console, and in the facility;
- (D) viewing and intercom systems;
- (E) treatment room doors from inside and outside the treatment room; and
- (F) electrically assisted treatment room doors with the teletherapy unit electrical power turned "off".

(4) The licensee shall have an authorized medical physicist review the results of each spot check and submit a written report to the licensee within 15 days of the spot check.

(5) If the results of the checks required in paragraph (3) of this subsection indicate the malfunction of any system, the licensee shall lock the control console in the "off" position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

(6) The licensee shall retain a record of each spot check required by paragraphs (1) and (3) of this subsection, in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

- (A) date of the spot-check;
- (B) manufacturer's name and model and serial number for the teletherapy unit, and sealed source and instrument used to measure the output of the teletherapy unit;
- (C) assessment of timer linearity and constancy;
- (D) calculated "on-off" error;
- (E) determination of the coincidence of the radiation field and the field indicated by the light beam localizing device;
- (F) the determined accuracy of each distance measuring and localization device;
- (G) the difference between the anticipated output and the measured output;

(H) notations indicating the operability of each entrance door electrical interlock, each electrical or mechanical stop, each sealed source exposure indicator light, and the viewing and intercom system and doors;

(I) name of the individual who performed the periodic spot-check; and

(J) the signature of the authorized medical physicist who reviewed the record of the spot check.

(nnn) Periodic spot checks for remote afterloader units.

(1) A licensee authorized to use a remote afterloader unit for medical use shall perform spot checks of each remote afterloader facility and on each unit as follows:

(A) before the first use each day of use of a high dose-rate, medium dose-rate, or pulsed dose-rate remote afterloader unit;

(B) before each patient treatment with a low dose-rate remote afterloader unit; and

(C) after each sealed source installation.

(2) The licensee shall perform the measurements required by paragraph (1) of this subsection in accordance with written procedures established by an authorized medical physicist. That individual need not actually perform the spot check measurements. The licensee shall maintain a copy of the written procedures in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency].

(3) The licensee shall have an authorized medical physicist review the results of each spot check and submit a written report to the licensee within 15 days of the spot check.

(4) To satisfy the requirements of paragraph (1) of this subsection, spot checks shall, at a minimum, assure proper operation of the following:

(A) electrical interlocks at each remote afterloader unit room entrance;

(B) sealed source exposure indicator lights on the remote afterloader unit, on the control console, and in the facility;

(C) viewing and intercom systems in each high dose-rate, medium dose-rate, and pulsed dose-rate remote afterloader facility;

(D) emergency response equipment;

(E) radiation monitors used to indicate the sealed source position;

(F) timer accuracy;

(G) clock (date and time) in the unit's computer; and

(H) decayed sealed source(s) activity in the unit's computer.

(5) If the results of the checks required in paragraph (4) of this subsection indicate the malfunction of any system, the licensee shall lock the control console in the "off" position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

(6) The licensee shall maintain a record, in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency], of each check required by paragraph (4) of this subsection. The record shall include the following, as applicable:

(A) date of the spot-check;

(B) manufacturer's name and model and serial number for the remote afterloader unit and sealed source;

(C) an assessment of timer accuracy;

(D) notations indicating the operability of each entrance door electrical interlock, radiation monitors, sealed source exposure indicator lights, viewing and intercom systems, clock, and decayed sealed source activity in the unit's computer;

(E) name of the individual who performed the periodic spot-check; and

(F) the signature of an authorized medical physicist who reviewed the record of the spot-check.

(ooo) Periodic spot checks for gamma stereotactic radiosurgery units.

(1) A licensee authorized to use a gamma stereotactic radiosurgery unit for medical use shall perform spot checks of each gamma stereotactic radiosurgery facility and on each unit as follows:

(A) monthly;

(B) before the first use of the unit on each day of use; and

(C) after each source installation.

(2) The licensee shall perform the measurements required by paragraph (1) of this subsection in accordance with written procedures established by an authorized medical physicist with a specialty in therapeutic radiological physics. That individual need not actually perform the spot check measurements. The licensee shall maintain a copy of the written procedures in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency].

(3) The licensee shall have an authorized medical physicist review the results of each spot check and submit a written report to the licensee within 15 days of the spot check.

(4) To satisfy the requirements of paragraph (1)(A) of this subsection, spot checks shall, at a minimum, achieve the following by:

(A) assurance of proper operation of these items:

(i) treatment table retraction mechanism, using backup battery power or hydraulic backups with the unit "off;"

(ii) helmet microswitches;

(iii) emergency timing circuits; and

(iv) stereotactic frames and localizing devices (trunnions); and

(B) determination of the following:

(i) the output for one typical set of operating conditions measured with the dosimetry system described in subsection (iii)(2) of this section;

(ii) the difference between the measurement made in clause (i) of this subparagraph and the anticipated output, expressed as a percentage of the anticipated output, (i.e., the value obtained at last full calibration corrected mathematically for physical decay);

(iii) sealed source output against computer calculation;

(iv) timer accuracy and linearity over the range of use;

(v) "on-off" error; and

(vi) trunnion centricity.

(5) To satisfy the requirements of paragraph (1)(B) and (C) of this subsection, spot checks shall assure proper operation of the following:

(A) electrical interlocks at each gamma stereotactic radiosurgery room entrance;

(B) sealed source exposure indicator lights on the gamma stereotactic radiosurgery unit, on the control console, and in the facility;

(C) viewing and intercom systems;

(D) timer termination;

(E) radiation monitors used to indicate room exposures; and

(F) emergency "off" buttons.

(6) The licensee shall arrange for prompt repair of any system identified in paragraph (4) of this subsection that is not operating properly.

(7) If the results of the checks required in paragraph (5) of this subsection indicate the malfunction of any system, the licensee shall lock the control console in the "off" position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

(8) The licensee shall retain a record of each check required by paragraphs (4) and (5) of this subsection in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

(A) date of the spot check;

(B) manufacturer's name, and model and serial number for the gamma stereotactic radiosurgery unit and the instrument used to measure the output of the unit;

(C) an assessment of timer linearity and accuracy;

(D) the calculated "on-off" error;

(E) a determination of trunnion centricity;

(F) the difference between the anticipated output and the measured output;

(G) an assessment of sealed source output against computer calculations;

(H) notations indicating the operability of radiation monitors, helmet microswitches, emergency timing circuits, emergency "off" buttons, electrical interlocks, sealed source exposure indicator lights, viewing and intercom systems, timer termination, treatment table retraction mechanism, and stereotactic frames and localizing devices (trunnions);

(I) the name of the individual who performed the periodic spot check; and

(J) the signature of an authorized medical physicist who reviewed the record of the spot check.

(ppp) Additional technical requirements for mobile remote afterloader units.

(1) A licensee providing mobile remote afterloader service shall do the following:

(A) check survey instruments before medical use at each address of use or on each day of use, whichever is more frequent; and

(B) account for all sealed sources before departure from a client's address of use.

(2) In addition to the periodic spot checks required by subsection (nnn) of this section, a licensee authorized to use remote afterloaders for medical use shall perform checks on each remote afterloader unit before use at each address of use. At a minimum, checks shall be made to verify the operation of the following:

(A) electrical interlocks on treatment area access points;

(B) sealed source exposure indicator lights on the remote afterloader unit, on the control console, and in the facility;

(C) viewing and intercom systems;

(D) applicators, sealed source transfer tubes, and transfer tube-applicator interfaces;

(E) radiation monitors used to indicate room exposures;

(F) sealed source positioning (accuracy); and

(G) radiation monitors used to indicate whether the sealed source has returned to a safe shielded position.

(3) In addition to the requirements for checks in paragraph (2) of this subsection, the licensee shall ensure overall proper operation of the remote afterloader unit by conducting a simulated cycle of treatment before use at each address of use.

(4) If the results of the checks required in paragraph (2) of this subsection indicate the malfunction of any system, the licensee shall lock the control console in the "off" position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

(5) The licensee shall maintain a record for inspection by the department [agency], in accordance with subsection (xxx) [(www)] of this section, of each check required by paragraph (2) [subparagraph (B)] of this subsection [paragraph]. The record shall include the following:

(A) date of the check;

(B) manufacturer's name, model number and serial number of the remote afterloader unit;

(C) notations accounting for all sealed sources before the licensee departs from a facility;

(D) notations indicating the operability of each entrance door electrical interlock, radiation monitors, sealed source exposure indicator lights, viewing and intercom system, applicators and sealed source transfer tubes, and sealed source positioning accuracy; and

(E) the signature of the individual who performed the check.

(qqq) Radiation surveys.

(1) In addition to the survey requirements of §289.202(p) of this title, a person licensed to use sealed sources in this section shall make surveys to ensure that the maximum radiation levels and average radiation levels, from the surface of the main sealed source safe with the sealed source(s) in the shielded position, do not exceed the levels stated in the Sealed Source and Device Registry.

(2) The licensee shall make the survey required by paragraph (1) of this subsection at installation of a new sealed source and following repairs to the sealed source(s) shielding, the sealed source(s) driving unit, or other electronic or mechanical component that could expose the sealed source, reduce the shielding around the sealed source(s), or compromise the radiation safety of the unit or the sealed source(s).

(3) The licensee shall maintain a record for inspection by the department [agency], in accordance with subsection (xxx) [(www)] of this section, of the radiation surveys required by paragraph (1) of this subsection. The record shall include:

(A) date of the measurements;

(B) manufacturer's name, model number and serial number of the treatment unit, sealed source, and instrument used to measure radiation levels;

(C) each dose rate measured around the sealed source while the unit is in the "off" position and the average of all measurements; and

(D) the signature of the individual who performed the test.

(rrr) Full-inspection servicing [Five-year inspection] for teletherapy and gamma stereotactic radiosurgery units.

(1) The licensee shall have each teletherapy unit and gamma stereotactic radiosurgery unit fully inspected and serviced during each sealed source replacement [or at intervals not to exceed five years, whichever comes first,] to ensure [assure] proper functioning of the sealed source exposure mechanism and other safety components. The interval between each full-inspection servicing shall not exceed five years for each teletherapy unit and shall not exceed seven years for each gamma stereotactic radiosurgery unit.

(2) This inspection and servicing may only be performed by persons specifically licensed to do so by the department [agency], the NRC, or an agreement state.

(3) The licensee shall maintain a record of the inspection and servicing in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency]. The record shall include the following:

(A) date of inspection;

(B) manufacturer's name and model and serial number of both the treatment unit and the sealed source;

(C) a list of components inspected and serviced, and the type of service; [and]

(D) the inspector's radioactive material license number; and

(E) the signature of the inspector [individual performing the inspection].

(sss) Therapy-related computer systems for photon-emitting remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units. The licensee shall perform acceptance testing on the treatment planning system of therapy-related computer systems in accordance with published protocols accepted by nationally recognized bodies. At a minimum, the acceptance testing shall include, as applicable, verification of the following:

(1) the sealed source-specific input parameters required by the dose calculation algorithm;

(2) the accuracy of dose, dwell time, and treatment time calculations at representative points;

(3) the accuracy of isodose plots and graphic displays;

(4) the accuracy of the software used to determine sealed source positions from radiographic images; and

(5) the accuracy of electronic transfer of the treatment delivery parameters to the treatment delivery unit from the treatment planning system.

(ttt) Training for use of remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units. Except as provided in subsection (l) of this section, the licensee shall require an authorized user of a sealed source for a use authorized in subsection (ddd) of this section for [to be a physician who]:

(1) a physician who is certified by a medical specialty board whose certification process has been recognized by the department [agency], the NRC, or an agreement state and who meets the requirements of paragraph [paragraphs (2)(D) and] (3) of this subsection. The [(The)] names of board certifications that have been recognized by the department [agency], the NRC, or an agreement state are posted [appear] on the NRC's Medical Uses Licensee Toolkit web page [at <https://www.nrc.gov/materials/miau/med-use-toolkit/spec-board-cert.html>]. To have its certification recognized, a specialty board shall require all candidates for certification to:

(A) successfully complete a minimum of three years of residency training in a radiation therapy program approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education, the Royal College of Physicians and Surgeons of Canada, or the Committee on Post-Graduate Training of the American Osteopathic Association; and

(B) pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in radiation safety, radionuclide handling, treatment planning, quality assurance, and clinical use of stereotactic radiosurgery, remote afterloaders and external beam therapy; or

(2) the physician must meet the following requirements:

(A) [(2)] has completed a structured educational program in basic radionuclide handling techniques applicable to the use of a sealed source in a therapeutic medical unit including the following:

(i) [(A)] 200 hours of classroom and laboratory training in the following areas:

(I) [(i)] radiation physics and instrumentation;

(II) [(ii)] radiation protection;

(III) [(iii)] mathematics pertaining to the use and measurement of radioactivity; and

(IV) [(iv)] radiation biology; and

(ii) [(B)] 500 hours of work experience, under the supervision of an authorized user who meets the requirements of subsection (l) of this section, [and] this subsection, or equivalent NRC or agreement state requirements at a medical facility that is authorized to use radioactive material in subsection (ddd) of this section [institution] involving the following:

(I) [(i)] reviewing full calibration measurements and periodic spot checks;

(II) [(ii)] preparing treatment plans and calculating treatment times;

(III) [(iii)] using administrative controls to prevent a medical event involving the use of radioactive material;

(IV) [(iv)] implementing emergency procedures to be followed in the event of the abnormal operation of a medical unit or console;

(V) [(v)] checking and using survey meters; and

(VI) [(vi)] selecting the proper dose and how it is to be administered; and

(iii) [(c)] completion of three years of supervised clinical experience in radiation therapy, under an authorized user who meets the requirements of subsection (1) of this section, this subsection, or equivalent NRC or agreement state requirements, as part of a formal training program approved by the Residency Review Committee for Radiation Oncology of the Accreditation Council for Graduate Medical Education, the Royal College of Physicians and Surgeons of Canada, or the Committee on Postdoctoral Training of the American Osteopathic Association. This experience may be obtained concurrently with the supervised work experience required by clause (ii) of this subparagraph [(B) of this paragraph]; and

(B) [(d)] has obtained written attestation that the individual has satisfactorily completed the requirements of paragraphs (2)(A) [(1)(A) or (2)], and (3) of this subsection, and is able to independently fulfill the radiation safety-related duties as an authorized user of each type of therapeutic medical unit for which the individual is requesting authorized user status. The attestation must be obtained from either: [has achieved a level of competency sufficient to function independently as an authorized user of each type of therapeutic medical unit for which the individual is requesting authorized user status. The written attestation shall be signed by]

(i) a preceptor authorized user who meets the requirements in subsection (1) of this section, this subsection, or equivalent NRC or agreement state requirements for the type(s) [an authorized user for each type] of therapeutic medical unit for which the individual is requesting authorized user status; or [and]

(ii) a residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in subsection (1) of this section, this subsection, or equivalent NRC or agreement state requirements, for the type(s) of therapeutic medical unit for which the individual is requesting authorized user status, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in subparagraph (A) of this paragraph; and

(3) the physician has received training in device operation, safety procedures, and clinical use for the type(s) of use for which authorization is sought. This training requirement may be satisfied by satisfactory completion of a training program provided by the vendor for new users or by receiving training supervised by an authorized user or authorized medical physicist, as appropriate, who is authorized for the type(s) of use for which the individual is seeking authorization.

(uuu) Report and notification of a medical event.

(1) The licensee shall report any event as a medical event, except for an event [events] that results [result] from patient intervention [by a patient or human research subject], in which the administration of radioactive material, or radiation from radioactive material, except permanent implant brachytherapy, results in the following:

(A) a dose that differs from the prescribed dose or dose that would have resulted from the prescribed dosage by more than 5 rem (0.05 Sievert (Sv)) effective dose equivalent, 50 rem (0.5 Sv) to an organ or tissue, or 50 rem (0.5 Sv) shallow dose equivalent to the skin; and [either:]

(i) the total dose delivered differs from the prescribed dose by 20 percent [20%] or more;

(ii) the total dosage delivered differs from the prescribed dosage by 20 percent [20%] or more or falls outside the prescribed dosage range; or

(iii) the fractionated dose delivered differs from the prescribed dose, for a single fraction, by 50 percent [50%] or more;

(B) a dose that exceeds 5 rem (0.05 Sv) effective dose equivalent, 50 rem (0.5 Sv) to an organ or tissue, or 50 rem (0.5 Sv) shallow dose equivalent to the skin from any of the following:

(i) an administration of a wrong radioactive drug containing radioactive material or the wrong radionuclide for a brachytherapy procedure;

(ii) an administration of a radioactive drug containing radioactive material by the wrong route of administration;

(iii) an administration of a dose or dosage to the wrong individual or human research subject;

(iv) an administration of a dose or dosage delivered by the wrong mode of treatment; or

(v) a leaking sealed source; or

(C) a dose to the skin or an organ or tissue other than the treatment site that exceeds by

(i) 50 rem (0.5 Sv) or more the expected dose to that site from the procedure if the administration had been given in accordance with the written directive prepared or revised before administration; [to an organ or tissue] and

(ii) 50 percent [50%] or more of the [dose] expected dose to that site from the procedure if the administration had been given in accordance with the written directive prepared or revised before administration [from the administration defined in the written directive (excluding, for permanent implants, seeds that were implanted in the correct site but migrated outside the treatment site)].

(2) For permanent implant brachytherapy, the licensee shall report the administration of radioactive material or radiation from radioactive material (excluding sources that were implanted in the correct site but migrated outside the treatment site) that results in:

(A) the total source strength administered differing by 20 percent or more from the total source strength documented in the post-implantation portion of the written directive;

(B) the total source strength administered outside of the treatment site exceeding 20 percent of the total source strength documented in the post-implantation portion of the written directive; or

(C) an administration that includes any of the following:

(i) the wrong radionuclide;

- (ii) the wrong individual or human research subject;
- (iii) sealed source(s) implanted directly into a location discontinuous from the treatment site, as documented in the post-implantation portion of the written directive; or
- (iv) a leaking sealed source resulting in a dose that exceeds 50 rem (0.5 Sv) to an organ or tissue.

(3) [(2)] The licensee shall report any event resulting from patient intervention [of a patient or human research subject] in which the administration of radioactive material, or radiation from radioactive material, results or will result in an unintended permanent functional damage to an organ or a physiological system, as determined by a physician.

(4) [(3)] The licensee shall notify the department [agency] by telephone no later than the next calendar day after discovery of the medical event.

(5) [(4)] The licensee shall submit a written report to the department [agency] within 15 calendar days after discovery of the medical event. The written report shall include the following, excluding the individual's name or any other information that could lead to identification of the individual:

- (A) the licensee's name and radioactive material license number;
- (B) a description of the licensed source of radiation involved, including, for radioactive material, the kind, quantity, chemical and physical form, source and [and/or] device manufacturer, model number, and serial number, if applicable;
- (C) the name of the prescribing physician;
- (D) a brief description of the medical event;
- (E) why the event occurred;
- (F) the effect, if any, on the individual(s) who received the administration;
- (G) actions, if any, that have been taken, or are planned, to prevent recurrence; and
- (H) certification that the licensee notified the individual (or the individual's responsible relative or guardian), and if not, why not.

(6) [(5)] The licensee shall notify the referring physician and also notify the individual who is the subject of the medical event no later than 24 hours after its discovery, unless the referring physician personally informs the licensee either that he or she will inform the individual or that, based on medical judgment, telling the individual would be harmful. The licensee is not required to notify the individual without first consulting the referring physician. If the referring physician or the affected individual cannot be reached within 24 hours, the licensee shall notify the individual as soon as possible thereafter. The licensee shall not delay any appropriate medical care for the individual, including any necessary remedial care as a result of the medical event, because of any delay in notification. To meet the requirements of this subsection, the notification of the individual who is the subject of the medical event may be made instead to that individual's responsible relative or guardian. If a verbal notification is made, the licensee shall inform the individual or appropriate responsible relative or guardian, that a written description of the event can be obtained from the licensee upon request. The licensee shall provide the written description if requested.

(7) [(6)] Aside from the notification requirement, nothing in this section affects any rights or duties of licensees and physicians

in relation to each other, to individuals affected by the medical event, or to that individual's responsible relatives or guardians.

(8) [(7)] The licensee shall annotate a copy of the report provided to the department [agency] with the following information:

(A) the name of the individual who is the subject of the event; and

(B) an [a unique] identification number or if no other identification number is available, the social security number of the individual who is the subject of the event.

(9) [(8)] The licensee shall provide a copy of the annotated report to the referring physician, if other than the licensee, no later than 15 calendar days after the discovery of the event.

(10) [(9)] The licensee shall retain a copy of the annotated report of the medical event in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency].

(vvv) Report and notification of a dose to an embryo/fetus or nursing child.

(1) The licensee shall report any dose to an embryo/fetus that is greater than 5 rem (50 mSv) dose equivalent that is a result of an administration of radioactive material or radiation from radioactive material to a pregnant individual, unless the dose to the embryo/fetus was specifically approved, in advance, by the authorized user.

(2) The licensee shall report any dose to a nursing child that is a result of an administration of radioactive material to a breast-feeding [breast feeding] individual that:

(A) is greater than 5 rem (50 mSv) TEDE; or

(B) has resulted in unintended permanent functional damage to an organ or a physiological system, as determined by a physician.

(3) The licensee shall notify the department [agency] by telephone no later than the next calendar day after discovery of a dose to the embryo/fetus or nursing child that requires a report in accordance with paragraphs (1) or (2) of this subsection.

(4) The licensee shall submit a written report to the department [agency] no later than 15 calendar days after discovery of a dose to the embryo/fetus or nursing child that requires a report in accordance with paragraphs (1) or (2) of this subsection. The written report shall include the following, excluding the individual's or child's name or any other information that could lead to identification of the individual or child:

(A) the licensee's name and radioactive material license number;

(B) a description of the licensed source of radiation involved, including, for radioactive material, the kind, quantity, chemical and physical form, source and/or device manufacturer, model number, and serial number, if applicable;

(C) the name of the prescribing physician;

(D) a brief description of the event;

(E) why the event occurred;

(F) the effect, if any, on the embryo/fetus or the nursing child;

(G) actions, if any, that have been taken, or are planned, to prevent recurrence; and

(H) certification that the licensee notified the pregnant individual or mother (or the mother's or child's responsible relative or guardian), and if not, why not.

(5) The licensee shall notify the referring physician and also notify the pregnant individual or mother, both hereafter referred to as the mother, no later than 24 hours after discovery of an event that would require reporting in accordance with paragraphs (1) or (2) of this subsection, unless the referring physician personally informs the licensee either that he or she will inform the mother or that, based on medical judgment, telling the mother would be harmful. The licensee is not required to notify the mother without first consulting with the referring physician. If the referring physician or mother cannot be reached within 24 hours, the licensee shall make the appropriate notifications as soon as possible thereafter. The licensee may not delay any appropriate medical care for the embryo/fetus or for the nursing child, including any necessary remedial care as a result of the event, because of any delay in notification. To meet the requirements of this subsection, the notification may be made to the mother's or child's responsible relative or guardian instead of the mother, when appropriate. If a verbal notification is made, the licensee shall inform the mother, or the mother's or child's responsible relative or guardian, that a written description of the event can be obtained from the licensee upon request. The licensee shall provide such a written description if requested.

(6) The licensee shall annotate a copy of the report provided to the department [agency] with the following information:

(A) the name of the individual or the nursing child who is the subject of the event; and

(B) an [a unique] identification number or if no other identification number is available, the social security number of the [pregnant] individual [or the nursing child] who is the subject of the event.

(7) The licensee shall provide a copy of the annotated report as described in paragraph (6) of this subsection to the referring physician, if other than the licensee, no later than 15 days after the discovery of the event.

(8) The licensee shall retain a copy of the annotated report as described in paragraph (6) of this subsection of a dose to an embryo/fetus or a nursing child in accordance with subsection (xxx) [(www)] of this section for inspection by the department [agency].

(www) Report and notification for an eluate exceeding permissible molybdenum-99, strontium-82, and strontium-85 concentrations.

(1) The licensee shall notify by telephone the department at (512) 458-7460 and the distributor of the generator within seven calendar days after discovery that an eluate exceeded the permissible concentration listed in subsection (ii) of this section at the time of generator elution. The telephone report to the department must include the manufacturer, model number, and serial number (or lot number) of the generator; the results of the measurement; the date of the measurement; whether dosages were administered to patients or human research subjects, when the distributor was notified, and the action taken.

(2) The licensee shall submit a written report to the department within 30 calendar days after discovery of an eluate exceeding the permissible concentration at the time of generator elution. The written report must include the action taken by the licensee; the patient dose assessment; the methodology used to make this dose assessment if the eluate was administered to patients or human research subjects; and the probable cause and an assessment of failure in the licensee's equipment, procedures or training that contributed to the excessive readings if an error occurred in the licensee's breakthrough determination; and

the information in the telephone report as required by paragraph (1) of this subsection.

(xxx) [(www)] Records/documents for department [agency] inspection. Each licensee shall maintain copies of the following records/documents at each authorized use site and make them available to the department [agency] for inspection, upon reasonable notice.

Figure: 25 TAC §289.256(xxx)

[Figure: 25 TAC §289.256(www)]

§289.257. *Packaging and Transportation of Radioactive Material.*

(a) Purpose.

(1) This section establishes requirements for packaging, preparation for shipment, and transportation of radioactive material including radioactive waste.

(2) The packaging and transport of radioactive material are also subject to the requirements of §289.201 of this title (relating to General Provisions for Radioactive Material), §289.202 of this title (relating to Standards for Protection Against Radiation from Radioactive Materials), §289.203 of this title (relating to Notices, Instructions, and Reports to Workers; Inspections), §289.204 of this title (relating to Fees for Certificates of Registration, Radioactive Material Licenses, Emergency Planning and Implementation, and Other Regulatory Services), §289.205 of this title (relating to Hearing and Enforcement Procedures), §289.251 of this title (relating to Exemptions, General Licenses, and General License Acknowledgements), §289.252 of this title (relating to Licensing of Radioactive Material), and §289.256 of this title (relating to Medical and Veterinary Use of Radioactive Material) and to the regulations of other agencies (e.g., the United States Department of Transportation (DOT) and the United States Postal Service) having jurisdiction over means of transport. The requirements of this section are in addition to, and not in substitution for, other requirements.

(b) Scope.

(1) The requirements of this section apply to any licensee authorized by a specific or general license issued by the department [agency] to receive, possess, use, or transfer radioactive material, if the licensee delivers that material to a carrier for transport, transports the material outside the site of usage as specified in the department [agency] license, or transports that material on public highways. No provision of this section authorizes possession of radioactive material.

(2) Exemptions from the requirements for a license in subsection (c) of this section are specified in subsection (f) of this section. The general license in subsection (i)(2), (3), and (4) [subsection (i)] of this section requires that a United States Nuclear Regulatory Commission (NRC) certificate of compliance or other package approval be issued for the package to be used in accordance with the general license. A licensee transporting [The transport of] radioactive material, or delivering [delivery of] radioactive material to a carrier for transport, shall comply with [is subject to] the operating control [controls and procedural] requirements of subsections (l) - (q) of this section; the quality assurance requirements of subsections (s) - (u) and (w) - (bb) of this section; and [to] the general provisions of subsections (a) - (e) of this section, including DOT regulations referenced in subsection (e) of this section.

(c) Requirement for license. Except as authorized in a general or specific license issued by the department [agency], or as exempted in accordance with this section, no licensee may transport radioactive material or deliver radioactive material to a carrier for transport.

(d) Definitions. The following words and terms when used in this section shall have the following meaning, unless the context clearly indicates otherwise. To ensure compatibility with international trans-

portation standards, all limits in this section are given in terms of dual units: The International System of Units (SI) followed or preceded by United States (U.S.) standard or customary units. The U.S. customary units are not exact equivalents, but are rounded to a convenient value, providing a functionally equivalent unit. For the purpose of this section, SI units shall be used.

(1) A_1 --The maximum activity of special form radioactive material permitted in a Type A package. This value is either listed in Table 257-3 of subsection (ee)(6) of this section, or may be derived in accordance with the procedure prescribed in subsection (ee) of this section.

(2) A_2 --The maximum activity of radioactive material, other than special form, low specific activity (LSA) and surface contaminated object (SCO) material, permitted in a Type A package. This value is either listed in Table 257-3 of subsection (ee)(6) of this section, or may be derived in accordance with the procedure prescribed in subsection (ee) of this section.

(3) Carrier--A person engaged in the transportation of passengers or property by land or water as a common, contract, or private carrier, or by civil aircraft.

(4) Certificate holder--A person who has been issued a certificate of compliance or other package approval by the department [agency].

(5) Certificate of compliance--The certificate issued by the NRC that approves the design of a package for the transportation of radioactive materials.

(6) Chelating agent--Amine polycarboxylic acids (e.g., EDTA, DTPA), hydroxy-carboxylic acids, and polycarboxylic acids (e.g., citric acid, carboxylic acid, and glucinic acid).

(7) Chemical description--A description of the principal chemical characteristics of low-level radioactive waste (LLRW).

(8) Consignee--The designated receiver of the shipment of low-level radioactive waste.

(9) Consignment--Each shipment of a package or groups of packages or load of radioactive material offered by a shipper for transport.

(10) Containment system--The assembly of components of the packaging intended to retain the radioactive material during transport.

(11) Contamination--The presence of a radioactive substance on a surface in quantities in excess of 0.4 becquerel per square centimeter (Bq/cm²) (10⁻⁵ microcurie per square centimeter (μCi/cm²)) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm² (10⁻⁶ μCi/cm²) for all other alpha emitters.

(A) Fixed contamination means contamination that cannot be removed from a surface during normal conditions of transport.

(B) Non-fixed contamination means contamination that can be removed from a surface during normal conditions of transport.

(12) Conveyance--For transport on:

(A) public highway or rail by transport vehicle or large freight container;

(B) water by vessel, or any hold, compartment, or defined deck area of a vessel including any transport vehicle on board the vessel; and

(C) aircraft.

(13) Criticality Safety Index (CSI)--The dimensionless number (rounded up to the next tenth) assigned to and placed on the label of a fissile material package, to designate the degree of control of accumulation of packages, overpacks or freight containers containing fissile material during transportation. Determination of the criticality safety index is described in subsection (i) of this section and Title 10, Code of Federal Regulations (CFR), §71.22, §71.23, and §71.59. The criticality safety index for an overpack, freight container, consignment or conveyance containing fissile material packages is the arithmetic sum of the criticality safety indices of all the fissile material packages contained within the overpack, freight container, consignment or conveyance.

(14) Decontamination facility--A facility operating in accordance with an NRC, agreement state, or department [agency] license whose principal purpose is decontamination of equipment or materials to accomplish recycle, reuse, or other waste management objectives, and, for purposes of this section, is not considered to be a consignee for LLRW shipments.

(15) Deuterium--For the purposes of this section, this means deuterium and any deuterium compound, including heavy water, in which the ratio of deuterium atoms to hydrogen atoms exceeds 1:5000.

(16) Disposal container--A transport container principally used to confine LLRW during disposal operations at a land disposal facility (also see definition for high integrity container). Note that for some shipments, the disposal container may be the transport package.

(17) Environmental Protection Agency (EPA) identification number--The number received by a transporter following application to the administrator of EPA as required by Title 40, CFR, Part 263.

(18) Exclusive use--The sole use by a single consignor of a conveyance for which all initial, intermediate, and final loading and unloading are carried out in accordance with the direction of the consignor or consignee. The consignor and the carrier shall ensure that any loading or unloading is performed by personnel having radiological training and resources appropriate for safe handling of the consignment. The consignor shall issue specific instructions, in writing, for maintenance of exclusive use shipment controls, and include them with the shipping paper information provided to the carrier by the consignor.

(19) Fissile material--The radionuclides plutonium-239, plutonium-241, uranium-233, uranium-235, or any combination of these radionuclides. Fissile material means the fissile nuclides themselves, not material containing fissile nuclides. Unirradiated natural uranium and depleted uranium, and natural uranium or depleted uranium that has been irradiated in thermal reactors only are not included in this definition. Agency jurisdiction extends only to special nuclear material in quantities not sufficient to form a "critical mass" as defined in §289.201(b) of this title. Certain exclusions from fissile material controls are provided in subsection (h) of this section.

(20) Freight forwarder--A person or entity which holds itself out to the general public to provide transportation of property for compensation and in the ordinary course of its business:

(A) assembles and consolidates, or provides for assembling and consolidating, shipments and performs break-bulk and distribution operations of the shipments;

(B) assumes responsibility for the transportation from the place of receipt to the place of destination; and

(C) uses for any part of the transportation a rail, motor or water carrier subject to the jurisdiction of either the Federal Motor Carrier Safety Administration or the Surface Transportation Board.

(21) Generator--A licensee operating in accordance with an agency, NRC, or agreement state license who:

(A) is a waste generator as defined in this section; or

(B) is the licensee to whom waste can be attributed within the context of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (e.g., waste generated as a result of decontamination or recycle activities).

(22) Graphite--For the purposes of this section, this means graphite with a boron equivalent content of less than 5 parts per million and density greater than 1.5 grams per cubic centimeter.

(23) High integrity container (HIC)--A container commonly designed to meet the structural stability requirements of Title 10, CFR, §61.56, and to meet DOT requirements for a Type A package.

(24) Indian Tribe--An Indian or Alaska Native Tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. §479a.

~~[(25) Industrial package (IP)--A packaging that, together with its low specific activity (LSA) material or surface contaminated object (SCO) contents, meets the requirements of Title 49, CFR, §173.410 and §173.411. Industrial packages are categorized in Title 49, CFR, §173.411 as either:]~~

~~[(A) Industrial package Type 1 (IP-1);]~~

~~[(B) Industrial package Type 2 (IP-2); or]~~

~~[(C) Industrial package Type 3 (IP-3).]~~

(25) ~~[(26)]~~ Low-level radioactive waste (LLRW)--Radioactive material that meets the following criteria:

(A) LLRW is radioactive material that is:

(i) discarded or unwanted and is not exempt by rule adopted in accordance with the Texas Radiation Control Act (Act), Health and Safety Code, §401.106;

(ii) waste, as that term is defined in Title 10, CFR, §61.2; and

(iii) subject to:

(I) concentration limits established in Title 10, CFR, §61.55, or compatible rules adopted by the ~~department~~ ~~[agency]~~ or the Texas Commission on Environmental Quality (TCEQ), as applicable; and

(II) disposal criteria established in Title 10, CFR, or established by the ~~department~~ ~~[agency]~~ or TCEQ, as applicable.

(B) LLRW does not include:

(i) high-level radioactive waste as defined in Title 10, CFR, §60.2;

(ii) spent nuclear fuel as defined in Title 10, CFR, §72.3;

(iii) byproduct material defined in the Act, Health and Safety Code, §401.003(3)(B);

(iv) naturally occurring radioactive material (NORM) waste that is not oil and gas NORM waste;

(v) oil and gas NORM waste; or

(vi) transuranics greater than 100 nanocuries (3.7 kilobecquerels) per gram (g).

(26) ~~[(27)]~~ Low specific activity (LSA) material--Radioactive material with limited specific activity which is nonfissile or is excepted in accordance with subsection (h) of this section, and which satisfies the following descriptions and limits set forth in this section. Shielding materials surrounding the LSA material may not be considered in determining the estimated average specific activity of the package contents. LSA material shall be in one of the following three groups:

(A) LSA-I.

(i) Uranium and thorium ores, concentrates of uranium and thorium ores, and other ores containing naturally occurring radionuclides that are intended to be processed for the use of these radionuclides; or

(ii) Natural uranium, depleted uranium, natural thorium or their compounds or mixtures, provided they are unirradiated and in solid or liquid form; or

(iii) Radioactive material other than fissile material for which the A_2 value is unlimited; or

(iv) Other radioactive material (e.g.: mill tailings, contaminated earth, concrete, rubble, other debris, and activated material) in which the radioactivity is distributed throughout, and the estimated average specific activity does not exceed 30 times the value for exempt material activity concentration determined in accordance with subsection (ee) of this section.

(B) LSA-II.

(i) Water with tritium concentration up to 0.8 terabecquerel per liter (TBq/l) (20.0 curies per liter (Ci/l)); or

(ii) Other material in which the radioactivity is distributed throughout, and the average specific activity does not exceed 10^{-4} A₂/g for solids and gases, and 10^{-5} A₂/g for liquids.

(C) LSA-III. Solids (e.g., consolidated wastes, activated materials), excluding powders, that satisfy the requirements of Title 10, CFR, §71.77 in which:

(i) the radioactive material is distributed throughout a solid or a collection of solid objects, or is essentially uniformly distributed in a solid compact binding agent (such as concrete, bitumen, ceramic, etc.); and

(ii) the radioactive material is relatively insoluble, or it is intrinsically contained in a relatively insoluble material, so that, even with a loss of packaging, the loss of radioactive material per package by leaching, when placed in water for 7 days, will not exceed 0.1 A₂; and

(iii) the estimated average specific activity of the solid, excluding any shielding material, does not exceed 2×10^{-3} A₂/g.

(27) ~~[(28)]~~ Low toxicity alpha emitters--Natural uranium, depleted uranium, natural thorium; uranium-235, uranium-238, thorium-232, thorium-228 or thorium-230 when contained in ores or physical or chemical concentrates or tailings; or alpha emitters with a half-life of less than 10 days.

(28) ~~[(29)]~~ Maximum normal operating pressure--The maximum gauge pressure that would develop in the containment system in a period of 1 year under the heat condition specified in Title 10, CFR, §71.71(c)(1), in the absence of venting, external cooling by an ancillary system, or operational controls during transport.

(29) [(30)] Natural thorium--Thorium with the naturally occurring distribution of thorium isotopes (essentially 100 weight percent thorium-232).

(30) [(31)] Normal form radioactive material--Radioactive material that has not been demonstrated to qualify as special form radioactive material.

(31) [(32)] NRC Forms 540, 540A, 541, 541A, 542, and 542A--Official NRC forms referenced in subsection (ff) of this section which includes the information required by DOT in Title 49, CFR, Part 172. Licensees need not use originals of these forms as long as any substitute forms contain the equivalent information. Licensees may include additional information deemed relevant to the licensee's shipment of low-level radioactive waste. Upon agreement between the shipper and consignee, NRC Forms 541 (and 541A) and NRC Forms 542 (and 542A) or equivalent documents may be completed, transmitted, and stored in electronic media. The electronic media shall have the capability for producing legible, accurate, and complete records in the format of the uniform manifest.

(32) [(33)] Package--The packaging together with its radioactive contents as presented for transport.

(A) Fissile material package, Type AF package, Type BF package, Type B(U)F package, or Type B(M)F package--A fissile material packaging together with its fissile material contents.

(B) Type A package--A Type A packaging together with its radioactive contents. A Type A package is defined and shall comply with the DOT regulations in Title 49, CFR, Part 173.

(C) Type B package--A Type B packaging together with its radioactive contents. On approval by the NRC, a Type B package design is designated by NRC as B(U) unless the package has a maximum normal operating pressure of more than 700 kilopascals (kPa) (100 pounds per square inch (lb/ in²)) gauge or a pressure relief device that would allow the release of radioactive material to the environment under the tests specified in Title 10, CFR, §71.73 (hypothetical accident conditions), in which case it will receive a designation B(M). B(U) refers to the need for unilateral approval of international shipments; B(M) refers to the need for multilateral approval of international shipments. There is no distinction made in how packages with these designations may be used in domestic transportation. To determine their distinction for international transportation, see DOT regulations in Title 49, CFR, Part 173. A Type B package approved before September 6, 1983, was designated only as Type B. Limitations on its use are specified in Title 10, CFR, §71.19.

(33) [(34)] Packaging--The assembly of components necessary to ensure compliance with the packaging requirements of this section. It may consist of one or more receptacles, absorbent materials, spacing structures, thermal insulation, radiation shielding, and devices for cooling or absorbing mechanical shocks. The vehicle, tie-down system, and auxiliary equipment may be designated as part of the packaging.

(34) [(35)] Physical description--The items called for on NRC Form 541 to describe a LLRW.

(35) [(36)] Registered freight forwarder--A freight forwarder that has an emergency plan approved in accordance with subsection (r) of this section and has been issued a registration letter.

(36) [(37)] Registered shipper--A shipper that has an emergency plan approved in accordance with subsection (r) of this section, and shipping containers approved in accordance with subsection(cc)(8) of this section and been issued a registration letter.

(37) [(38)] Registered transporter--A transporter that has an emergency plan approved in accordance with subsection (r) of this section, and proof of financial responsibility submitted and approved in accordance with subsection(e)(4) of this section and has been issued a registration letter.

(38) [(39)] Residual waste--LLRW resulting from processing or decontamination activities that cannot be easily separated into distinct batches attributable to specific waste generators. This waste is attributable to the processor or decontamination facility, as applicable.

(39) [(40)] Shipper--The licensed entity (i.e., the waste generator, waste collector, or waste processor) who offers LLRW for transportation, typically consigning this type of waste to a licensed waste collector, waste processor, or land disposal facility operator. This definition applies only to shipments of LLRW shipped to a Texas LLRW disposal facility.

(40) [(41)] Site of usage--The licensee's facility, including all buildings and structures between which radioactive material is transported and all roadways that are not within the public domain on which radioactive material can be transported.

(41) [(42)] Special form radioactive material--Radioactive material that satisfies the following conditions:

(A) it is either a single solid piece or is contained in a sealed capsule that can be opened only by destroying the capsule;

(B) the piece or capsule has at least one dimension not less than five [5] millimeters (0.2 in); and

(C) it satisfies the requirements of Title 10, CFR, §71.75. A special form encapsulation designed in accordance with the requirements of this subsection in effect on or after June 30, 1983 (see Title 10, CFR, Part 71, revised as of January 1, 1983), and constructed before July 1, 1985; a special form encapsulation designed in accordance with the requirements of this subsection in effect on or after March 31, 1996 (see Title 10, CFR, Part 71, revised as of January 1, 1996), and constructed before April 1, 1998; and

(D) special form material that was successfully tested before September 10, 2015, in accordance with the requirements of Title 10, CFR, §71.75(d) in effect before September 10, 2015 may continue to be used. Any other special form encapsulation must meet the specifications of this definition.

(42) [(43)] Specific activity of a radionuclide--The radioactivity of the radionuclide per unit mass of that nuclide. The specific activity of a material in which the radionuclide is essentially uniformly distributed is the radioactivity per unit mass of the material.

(43) [(44)] Spent nuclear fuel or spent fuel--Fuel that has been withdrawn from a nuclear reactor following irradiation, has undergone at least one [1] year's decay since being used as a source of energy in a power reactor, and has not been chemically separated into its constituent elements by reprocessing. Spent fuel includes the special nuclear material, byproduct material, source material, and other radioactive materials associated with fuel assemblies.

(44) [(45)] Surface contaminated object (SCO)--A solid object that is not itself classed as radioactive material, but which has radioactive material distributed on any of its surfaces. A SCO shall be in one of the following two groups with surface activity not exceeding the following limits:

(A) SCO-I--A solid object on which:

(i) the non-fixed contamination on the accessible surface averaged over 300 square centimeters (cm²) (or the area of the surface if less than 300 cm²) does not exceed 4 becquerels per square

centimeter (Bq/cm²) (10⁻⁴ microcurie per square centimeter (μCi/cm²)) for beta and gamma and low toxicity alpha emitters, or 4 x 10⁻¹ Bq/cm² (10⁻⁵ μCi/cm²) for all other alpha emitters;

(ii) the fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 4 x 10⁴ Bq/cm² (1 μCi/cm²) for beta and gamma and low toxicity alpha emitters, or 4 x 10³ Bq/cm² (10⁻¹ μCi/cm²) for all other alpha emitters; and

(iii) the non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 4 x 10⁴ Bq/cm² (1 μCi/cm²) for beta and gamma and low toxicity alpha emitters, or 4 x 10³ Bq/cm² (10⁻¹ μCi/cm²) for all other alpha emitters.

(B) SCO-II--A solid object on which the limits for SCO-I are exceeded and on which the following limits are not exceeded:

(i) the non-fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 400 Bq/cm² (10⁻² μCi/cm²) for beta and gamma and low toxicity alpha emitters or 40 Bq/cm² (10⁻³ μCi/cm²) for all other alpha emitters;

(ii) the fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 8 x 10⁵ Bq/cm² (20 μCi/cm²) for beta and gamma and low toxicity alpha emitters, or 8 x 10⁴ Bq/cm² (2 μCi/cm²) for all other alpha emitters; and

(iii) the non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 8 x 10⁵ Bq/cm² (20 μCi/cm²) for beta and gamma and low toxicity alpha emitters, or 8 x 10⁴ Bq/cm² (2 μCi/cm²) for all other alpha emitters.

(45) [(46)] Transporter--A carrier who transports radioactive material.

(46) [(47)] Tribal official--The highest ranking individual that represents Tribal leadership, such as the Chief, President, or Tribal Council leadership.

(47) [(48)] Uniform Low-Level Radioactive Waste Manifest or uniform manifest--The combination of NRC Forms 540, 541, and, if necessary, 542, and their respective continuation sheets as needed, or equivalent.

(48) [(49)] Unirradiated uranium--Uranium containing not more than 2 x 10³ Bq (0.054 μCi) of plutonium per gram of uranium-235, not more than 9 x 10⁶ Bq (243 μCi) of fission products per gram of uranium-235, and not more than 5 x 10⁻³ g of uranium-236 per gram of uranium-235.

(49) [(50)] Uranium--Natural, depleted, enriched:

(A) Natural uranium--Uranium (which may be chemically separated) with the naturally occurring distribution of uranium isotopes (approximately 0.711 weight percent uranium-235, and the remainder by weight essentially uranium-238).

(B) Depleted uranium--Uranium containing less uranium-235 than the naturally occurring distribution of uranium isotopes.

(C) Enriched uranium--Uranium containing more uranium-235 than the naturally occurring distribution of uranium isotopes.

(50) [(51)] Waste collector--An entity, operating in accordance with an agency, NRC, or agreement state license, whose principal purpose is to collect and consolidate waste generated by others, and

to transfer this waste, without processing or repackaging the collected waste, to another licensed waste collector, licensed waste processor, or licensed land disposal facility.

(51) [(52)] Waste description--The physical, chemical and radiological description of a LLRW as called for on NRC Form 541.

(52) [(53)] Waste generator--An entity, operating in accordance with an agency, NRC, or agreement state license, who:

(A) possesses any material or component that contains radioactivity or is radioactively contaminated for which the licensee foresees no further use; and

(B) transfers this material or component to a licensed land disposal facility or to a licensed waste collector or processor for handling or treatment before [prior to] disposal. A licensee performing processing or decontamination services may be a waste generator if the transfer of LLRW from its facility is defined as residual waste.

(53) [(54)] Waste processor--An entity, operating in accordance with an NRC or agreement state license, whose principal purpose is to process, repackage, or otherwise treat LLRW or waste generated by others before [prior to] eventual transfer of waste to a licensed LLRW land disposal facility.

(54) [(55)] Waste type--A waste within a disposal container having a unique physical description (i.e., a specific waste descriptor code or description; or a waste sorbed on or solidified in a specifically-defined media).

(e) Transportation of radioactive material.

(1) Each licensee who transports radioactive material outside the site of usage as specified in the department [agency] license, transports on public highways, or delivers radioactive material to a carrier for transport, shall comply with the applicable requirements of the DOT regulations in Title 49, CFR, Part 107, Parts 171 - 180 and 390 - 397 appropriate to the mode of transport. The licensee shall particularly note DOT regulations in the following areas:

(A) Packaging - Title 49, CFR, Part 173: Subparts A, B, and I.

(B) Marking and labeling - Title 49, CFR, Part 172: Subpart D, and §§172.400 - 172.407 and §§172.436 - 172.441 of Subpart E.

(C) Placarding - Title 49, CFR, Part 172: Subpart F, especially §§172.500 - 172.519 and §172.556, and Appendices B and C.

(D) Accident reporting - Title 49, CFR, Part 171: §171.15 and §171.16.

(E) Shipping papers and emergency information - Title 49, CFR, Part 172: Subparts C and G.

(F) Hazardous material employee training - Title 49, CFR, Part 172: Subpart H.

(G) Hazardous material shipper/carrier registration - Title 49, CFR, Part 107: Subpart G.

(H) Security Plans - Title 49, CFR, Part 172: Subpart I.

(2) The licensee shall also note DOT regulations pertaining to the following modes of transportation:

(A) Rail: Title 49, CFR Part 174: Subparts A through D and K.

(B) Air: Title 49, CFR Part 175.

(C) Vessel: Title 49, CFR Part 176: Subparts A through F and M.

(D) Public Highway: Title 49, CFR Part 177 and Parts 390 through 397.

(3) If DOT regulations are not applicable to a shipment of radioactive material (i.e. DOT does not have jurisdiction), the licensee shall conform to DOT standards and requirements specified in paragraph (1) of this subsection to the same extent as if the shipment or transportation were subject to DOT regulations. A request for modification, waiver, or exemption from those requirements shall be filed and approved by the department [agency]. Any notification referred to in those requirements, shall be submitted to the department [agency].

(4) Transporter proof of financial responsibility.

(A) Transporters of low-level radioactive waste to a Texas low-level radioactive waste disposal site shall submit proof of financial responsibility required by Title 49, CFR, §387.7 and §387.9, to the department [agency] and receive a registration letter from the department before [agency prior to] initial shipment.

(B) The transporter registration expires on the expiration date of the proof of financial responsibility or in 10 years, if the proof of financial responsibility does not have an expiration date.

(C) To renew a transporter's registration, the transporter shall submit to the department [agency] new proof of financial responsibility.

(D) The transporter shall submit to the department [agency] new proof of financial responsibility any time the amount of liability coverage is reduced or a new policy is purchased.

(5) The department [agency] shall review and determine alternate routes for the transportation and routing of radioactive material in accordance with 49 CFR, §397.103.

(f) Exemption for low-level radioactive materials.

(1) A licensee is exempt from all requirements of this section with respect to shipment or carriage of the following low-level materials:

(A) Natural material and ores containing naturally occurring radionuclides that are either in their natural state, or have only been processed for purposes other than for the extraction of the radionuclides, and which are not intended to be processed for use of these radionuclides, provided the activity concentration of the material does not exceed 10 times the applicable radionuclide activity concentration values specified in subsection (ee), (ee)(7), and (ee)(8) of this section.

(B) Materials for which the activity concentration is not greater than the activity concentration values specified in subsection (ee), (ee)(7), and (ee)(8) of this section, or for which the consignment activity is not greater than the limit for an exempt consignment found in subsection (ee), (ee)(7), and (ee)(8) of this section.

(C) Non-radioactive solid objects with radioactive substances present on any surfaces in quantities not in excess of the levels cited in the definition of contamination in subsection (d) of this section.

(2) Common and contract carriers, freight forwarders, warehousemen, and the United States Postal Service are exempt from the regulations in this subchapter to the extent that they transport or store radioactive material in the regular course of their carriage for another or storage incident thereto.

(3) Persons who discard licensed material in accordance with §289.202(ff) of this title are exempt from all requirements of this section.

(g) Exemption of physicians. Any physician licensed by a State to dispense drugs in the practice of medicine is exempt from subsection (e) of this section [Title 40, CFR, §71.5] with respect to transport by the physician of licensed material for use in the practice of medicine. However, any physician operating under this exemption shall be licensed in accordance with §289.256 of this title [under Title 40, CFR, Part 35] or the equivalent NRC or agreement state regulations.

(h) Exemption from classification as fissile material. Fissile materials meeting the requirements of at least one of the paragraphs (1) through (6) of this subsection are exempt from classification as fissile material and from the fissile material package standards of Title 10, CFR §71.55 and §71.59, but are subject to all other requirements of this section, except as noted.

(1) An individual package containing 2 grams or less fissile material.

(2) Individual or bulk packaging containing 15 grams or less of fissile material provided the package has at least 200 grams of solid nonfissile material for every gram of fissile material. Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but shall not be included in determining the required mass for solid nonfissile material.

(3) Solid fissile material commingled with solid non-fissile material.

(A) Low concentrations of solid fissile material commingled with solid nonfissile material provided:

(i) that there is at least 2000 grams of solid nonfissile material for every gram of fissile material; and

(ii) there is no more than 180 grams of fissile material distributed within 360 kg of contiguous non-fissile material.

(B) Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but shall not be included in determining the required mass of solid nonfissile material.

(4) Uranium enriched in uranium-235 to a maximum of one percent [1%] by weight, and with total plutonium and uranium-233 content of up to one percent [1%] of the mass of uranium-235, provided that the mass of any beryllium, graphite, and hydrogenous material enriched in deuterium constitutes less than five percent [5%] of the uranium mass, and that the fissile material is distributed homogeneously and does not form a lattice arrangement within the package.

(5) Liquid solutions of uranyl nitrate enriched in uranium-235 to a maximum of two percent [2%] by mass, with a total plutonium and uranium-233 content not exceeding 0.002 percent [0.002%] of the mass of uranium, and with a minimum nitrogen to uranium atomic ratio (N/U) of 2. The material shall be contained in at least a DOT Type A package.

(6) Packages containing, individually, a total plutonium mass of not more than 1000 grams, of which not more than 20 percent [20%] by mass may consist of plutonium-239, plutonium-241, or any combination of these radionuclides.

(i) General license.

(1) NRC-approved package.

(A) A general license is issued to any licensee of the department [agency] to transport, or to deliver to a carrier for transport, radioactive material in a package for which a license, certificate of compliance (CoC), or other approval has been issued by the NRC.

(B) This general license applies only to a licensee who has a quality assurance program approved by the NRC as satisfying the provisions of Title 10, CFR, Part 71, Subpart H.

(C) This general license applies only to a licensee who meets the following requirements:

(i) has a copy of the CoC or other approval by the NRC of the package, and has the drawings and other documents referenced in the approval relating to the use and maintenance of the packaging and to the actions to be taken before shipment; and

(ii) complies with the terms and conditions of the specific license, certificate, or other approval by the NRC, as applicable, and the applicable requirements of Title 10, CFR, Part 71, Subparts A, G, and H; and

(iii) before the licensee's first use of the package, submits in writing to: ATTN: Document Control Desk, Director, Division of [Spent] Fuel Management [Storage and Transportation], Office of Nuclear Material Safety and Safeguards, using an appropriate method listed in Title 10, CFR, Part 71, the licensee's name and license number and the package identification number specified in the package approval.

(D) This general license applies only when the package approval authorizes use of the package in accordance with this general license.

(E) For a Type B or fissile material package, the design of which was approved by NRC before April 1, 1996, the general license is subject to the additional restrictions of paragraph (2) of this subsection.

(F) For radiography containers, a program for transport container inspection and maintenance limited to radiographic exposure devices, source changers, or packages transporting these devices and meeting the requirements of §289.255(m)(2)(B) of this title (relating to Radiation Safety Requirements and Licensing and Registration Procedures for Industrial Radiography), is deemed to satisfy the requirements of subparagraph (B) of this paragraph.

~~[(2) Previously approved package.]~~

~~[(A) A Type B package previously approved by the NRC, but not designated as B(U), B(M), B(U)F or B(M)F in the identification number of the NRC certificate of compliance, or Type AF packages approved by the NRC prior to September 6, 1983, may be used in accordance with the general license of paragraph (1) of this subsection with the following additional conditions:]~~

~~[(i) fabrication of the packaging was satisfactorily completed before August 31, 1986, as demonstrated by application of its model number in accordance with subsection (k)(3) of this section;]~~

~~[(ii) a serial number that uniquely identifies each packaging which conforms to the approved design is assigned to, and legibly and durably marked on, the outside of each packaging; and]~~

~~[(iii) subparagraph (A) of this paragraph expires October 1, 2008.]~~

~~[(B) A Type B(U) package, a Type B(M) package, or a fissile material package, previously approved by the NRC with the designation "-85" in the identification number of the NRC CoC, may be used in accordance with the general license of paragraph (1) of this subsection with the following additional conditions:]~~

~~[(i) fabrication of the package is satisfactorily completed by April 1, 1999, as demonstrated by application of its model number in accordance with subsection (k)(3) of this section;]~~

~~[(ii) a package used for a shipment to a location outside the United States is subject to multilateral approval as defined in DOT regulations Title 49, CFR §173.403; and]~~

~~[(iii) a serial number which uniquely identifies each packaging which conforms to the approved design is assigned to and legibly and durably marked on the outside of each packaging.]~~

~~[(C) A Type B(U) package, a Type B(M) package, or a fissile material package, previously approved by the NRC with the designation "-85" in the identification number of the NRC CoC, may be used in accordance with the general license of paragraph (1) of this subsection with the following additional conditions:]~~

~~[(i) fabrication of the package shall be satisfactorily completed by December 31, 2006, as demonstrated by application of its model number in accordance with subsection (k)(3) of this section.]~~

~~[(ii) after December 31, 2003, a package used for a shipment to a location outside the United States is subject to multilateral approval as defined in DOT regulations Title 49, CFR, §173.403.]~~

~~[(3) DOT specification container.]~~

~~[(A) A general license is issued to any licensee to transport, or to deliver to a carrier for transport, licensed material in a specification container for fissile material or for a Type B quantity of radioactive material as specified in Title 49, CFR, Parts 173 and 178.]~~

~~[(B) This general license applies only to a licensee who:]~~

~~[(i) has a quality assurance program required by subsections (s), (t), and (u) of this section and Title 10, CFR, Part 71, Subpart H;]~~

~~[(ii) has a copy of the specification; and]~~

~~[(iii) complies with the terms and conditions of the specification and the applicable requirements of this section.]~~

~~[(C) The general license in subparagraph (A) of this paragraph is subject to the limitation that the specification container may not be used for a shipment to a location outside the United States except by multilateral approval as defined in Title 49, CFR, §173.403.]~~

~~(2) [(4)] Use of foreign approved package.~~

~~(A) A general license is issued to any licensee to transport, or to deliver to a carrier for transport, licensed material in a package the design of which has been approved in a foreign national competent authority certificate that has been revalidated by the DOT as meeting the applicable requirements of Title 49, CFR, §171.23.~~

~~(B) Except as otherwise provided by this section, the general license applies only to a licensee who has a quality assurance program approved by the department [NRC] as satisfying the applicable provisions of subsection (s) - (u) and (w) - (bb) of this section [Title 10, CFR, Part 71].~~

~~(C) This general license applies only to shipments made to or from locations outside the United States.~~

~~(D) Each licensee issued a [This] general license under subparagraph (A) of this paragraph shall [applies only to a licensee who]:~~

~~(i) maintain [has] a copy of the applicable certificate, the revalidation, and the drawings and other documents referenced in the certificate relating to the use and maintenance of the packaging and to the actions to be taken before [prior to] shipment; and~~

(ii) comply [~~complies~~] with the terms and conditions of the certificate and revalidation, and with the applicable requirements of §289.205(j) and (k) of this title and subsections (a) - (e), (j) - (q), (s) - (u) and (w) - (bb) of this section [Title 10, CFR, Part 71, Subparts A, G, and H].

(3) [(5)] Fissile material.

(A) A general license is issued to any licensee to transport fissile material, or to deliver fissile material to a carrier for transport, if the material is shipped in accordance with this section. The fissile material need not be contained in a package that meets the standards of this section; however, the material shall be contained in a Type A package. The Type A package shall also meet the DOT requirements of Title 49, CFR, §173.417(a).

(B) The general license applies only to a licensee who has a quality assurance program approved by the NRC as satisfying the provisions of Title 10, CFR, Part 71.

(C) The general license applies only when a package's contents:

(i) contain no more than a Type A quantity of radioactive material; and

(ii) contain less than 500 total grams of beryllium, graphite, or hydrogenous [~~hydrogeneous~~] material enriched in deuterium.

(D) The general license applies only to packages containing fissile material that are labeled with a CSI that:

(i) has been determined in accordance with paragraph (E) of this subsection;

(ii) has a value less than or equal to 10.0; and

(iii) for a shipment of multiple packages containing fissile material, the sum of the CSIs shall be less than or equal to 50.0 (for shipment on a nonexclusive use conveyance) and less than or equal to 100.0 (for shipment on an exclusive use conveyance).

(E) The CSI shall be as follows:

(i) the value for the CSI shall be greater than or equal to the number calculated by the following equation:

Figure: 25 TAC §289.257(i)(3)(E)(i)
[Figure: 25 TAC §289.257(i)(5)(E)(i)]

(ii) the calculated CSI shall be rounded up to the first decimal place;

(iii) the values of X, Y, and Z used in the CSI equation shall be taken from Tables 257-1 or 257-2 of this clause, as appropriate;

Figure: 25 TAC §289.257(i)(3)(E)(iii)
[Figure: 25 TAC §289.257(i)(5)(E)(iii)]

(iv) if Table 257-2 of clause (iii) of this subparagraph is used to obtain the value of X, then the values for the terms in the equation for uranium-233 and plutonium shall be assumed to be zero; and

(v) Table 257-1 values of clause (iii) of this subparagraph for X, Y, and Z shall be used to determine the CSI if:

(I) uranium-233 is present in the package;

(II) the mass of plutonium exceeds one percent [4%] of the mass of uranium-235;

(III) the uranium is of unknown uranium-235 enrichment, or greater than 24 weight percent enrichment; or

(IV) substances having a moderating effectiveness (i.e. an average hydrogen density greater than H₂O) (e.g. certain hydrocarbon oils or plastics) are present in any form, except as polyethylene used for packing or wrapping.

(4) [(6)] Plutonium-beryllium special form material.

(A) A general license is issued to any licensee to transport fissile material in the form of plutonium-beryllium (Pu-Be) special form sealed sources, or to deliver Pu-Be sealed sources to a carrier for transport, if the material is shipped in accordance with this section. This material need not be contained in a package that meets the standards of Title 10, CFR, Part 71, however, the material shall be contained in a Type A package. The Type A package shall also meet the DOT requirements of Title 49, CFR, §173.417(a).

(B) The general license applies only to a licensee who has a quality assurance program approved by the NRC as satisfying the provisions of Title 10, CFR, Part 71.

(C) The general license applies only when a package's contents:

(i) contain no more than a Type A quantity of material; and

(ii) contain less than 1000g of plutonium, provided that plutonium-239, plutonium-241, or any combination of these radionuclides, constitutes less than 240 g of the total quantity of plutonium in the package.

(D) The general license applies only to packages labeled with a CSI that:

(i) has been determined in accordance with subparagraph (E) of this paragraph;

(ii) has a value less than or equal to 100.0; and

(iii) for a shipment of multiple packages containing Pu-Be sealed sources, the sum of the CSIs shall be less than or equal to 50.0 (for shipment on a nonexclusive use conveyance) and less than or equal to 100.0 (for shipment on or exclusive use conveyance).

(E) The value for the CSI shall be as follows:

(i) the CSI shall be greater than or equal to the number calculated by the following equation:

Figure: 25 TAC §289.257(i)(4)(E)(i)
[Figure: 25 TAC §289.257(i)(6)(E)(i)]

(ii) the calculated CSI shall be rounded up to the first decimal place.

(j) Assumptions as to unknown properties. When the isotopic abundance, mass, concentration, degree of irradiation, degree of moderation, or other pertinent property of fissile material in any package is not known, the licensee shall package the fissile material as if the unknown properties have credible values that will cause the maximum neutron multiplication.

(k) Preliminary determinations. Before the first use of any packaging for the shipment of licensed material the licensee shall [;]

[(1) ascertain that there are no cracks, pinholes, uncontrolled voids, or other defects that could significantly reduce the effectiveness of the packaging;]

[(2) where the maximum normal operating pressure will exceed 35 kPa (5 lbf/in²) gauge, test the containment system at an internal pressure at least 50% higher than the maximum normal operating pressure, to verify the capability of that system to maintain its structural integrity at that pressure;]

[(3) conspicuously and durably mark the packaging with its model number, serial number, gross weight, and a package identification number assigned by NRC. Before applying the model number, the licensee shall determine that the packaging has been fabricated in accordance with the design approved by the NRC; and]

[(4) ascertain that the determinations [in subsections (a) through (e) of this section] have been made in accordance with Title 10, CFR, §71.85.

(l) Routine determinations. Before each shipment of radioactive material, the licensee shall ensure that the package with its contents satisfies the applicable requirements of this section and of the license. The licensee shall determine that:

- (1) the package is proper for the contents to be shipped;
- (2) the package is in unimpaired physical condition except for superficial defects such as marks or dents;
- (3) each closure device of the packaging, including any required gasket, is properly installed, secured, and free of defects;
- (4) any system for containing liquid is adequately sealed and has adequate space or other specified provision for expansion of the liquid;
- (5) any pressure relief device is operable and set in accordance with written procedures;
- (6) the package has been loaded and closed in accordance with written procedures;
- (7) for fissile material, any moderator or neutron absorber, if required, is present and in proper condition;
- (8) any structural part of the package that could be used to lift or tie down the package during transport is rendered inoperable for that purpose, unless it satisfies the design requirements of Title 10, CFR, §71.45;
- (9) the level of non-fixed (removable) radioactive contamination on the external surfaces of each package offered for shipment is as low as reasonably achievable (ALARA), and within the limits specified in DOT regulations in Title 49, CFR, §173.443;

(10) external radiation levels around the package and around the vehicle, if applicable, will not exceed the following limits at any time during transportation:

(A) Except as provided in subparagraph (B) of this paragraph, each package of radioactive materials offered for transportation shall be designed and prepared for shipment so that under conditions normally incident to transportation the radiation level does not exceed 2 mSv/hr (200 mrem/hr) at any point on the external surface of the package, and the transport index does not exceed 10.

(B) A package that exceeds the radiation level limits specified in subparagraph (A) of this paragraph shall be transported by exclusive use shipment only, and the radiation levels for such shipment shall not exceed the following during transportation:

(i) 2 mSv/hr (200 mrem/hr) on the external surface of the package, unless the following conditions are met, in which case the limit is 10 mSv/hr (1,000 mrem/hr):

- (I) the shipment is made in a closed transport vehicle;
- (II) the package is secured within the vehicle so that its position remains fixed during transportation; and

(III) there are no loading or unloading operations between the beginning and end of the transportation;

(ii) 2 mSv/hr (200 mrem/hr) at any point on the outer surface of the vehicle, including the top and underside of the vehicle; or in the case of a flat-bed style vehicle, at any point on the vertical planes projected from the outer edges of the vehicle, on the upper surface of the load or enclosure, if used, and on the lower external surface of the vehicle; and

(iii) 0.1 mSv/hr (10 mrem/hr) at any point 2 meters (m) (6.6 feet (ft)) from the outer lateral surfaces of the vehicle (excluding the top and underside of the vehicle); or in the case of a flat-bed style vehicle, at any point 2 m (6.6 ft) from the vertical planes projected by the outer edges of the vehicle (excluding the top and underside of the vehicle); and

(iv) 0.02 mSv/hr (2 mrem/hr) in any normally occupied space, except that this provision does not apply to private carriers, if exposed personnel under their control wear radiation dosimetry devices in conformance with §289.202(q) of this title. [;]

(C) For shipments made in accordance with the provisions of subparagraph (B) of this paragraph, the shipper shall provide specific written instructions to the carrier for maintenance of the exclusive use shipment controls. The instructions shall be included with the shipping paper information.

(D) The written instructions required for exclusive use shipments shall be sufficient so that, when followed, they will cause the carrier to avoid actions that will unnecessarily delay delivery or unnecessarily result in increased radiation levels or radiation exposures to transport workers or members of the general public.

~~[(11) a package shall be designed, constructed, and prepared for transport so that in still air at 38 degrees Celsius (100 degrees Fahrenheit) and in the shade, no accessible surface of a package would have a temperature exceeding 50 degrees Celsius (122 degrees Fahrenheit) in a nonexclusive use shipment, or 85 degrees Celsius (185 degrees Fahrenheit) in an exclusive use shipment. Accessible package surface temperatures shall not exceed these limits at any time during transportation.]~~

(m) Air transport of plutonium.

(1) Notwithstanding the provisions of any general licenses and notwithstanding any exemptions stated directly in this section or included indirectly by citation of Title 49, CFR, Chapter I, as may be applicable, the licensee shall assure that plutonium in any form, whether for import, export, or domestic shipment, is not transported by air or delivered to a carrier for air transport unless:

(A) the plutonium is contained in a medical device designed for individual human application; or

(B) the plutonium is contained in a material in which the specific activity is less than or equal to the activity concentration values for plutonium specified in Table 257-4 of subsection (ee)(7) of this section, and in which the radioactivity is essentially uniformly distributed; or

(C) the plutonium is shipped in a single package containing no more than an A_2 quantity of plutonium in any isotope or form, and is shipped in accordance with subsection (e) of this section; or

(D) the plutonium is shipped in a package specifically authorized for the shipment of plutonium by air in the Certificate of Compliance for that package issued by the NRC.

(2) Nothing in paragraph (1) of this subsection is to be interpreted as removing or diminishing the requirements of Title 10, CFR, §73.24.

(3) For a shipment of plutonium by air which is subject to paragraph (1) of this subsection, the licensee shall, through special arrangement with the carrier, require compliance with Title 49, CFR, §175.704, DOT regulations applicable to the air transport of plutonium.

(n) Opening instructions. Before delivery of a package to a carrier for transport, the licensee shall ensure that any special instructions needed to safely open the package have been sent to, or otherwise made available to, the consignee for the consignee's use in accordance with §289.202(ee)(5) of this title.

(o) Records.

(1) For a period of three [3] years after shipment, each licensee shall maintain, for inspection by the department [agency], a record of each shipment of radioactive material not exempt under subsection (f) of this section, including the following where applicable:

(A) identification of the packaging by model number and serial number;

(B) verification that there are no significant defects in the packaging, as shipped;

(C) volume and identification of coolant;

(D) type and quantity of radioactive material in each package, and the total quantity of each shipment;

(E) for each item of irradiated fissile material:

(i) identification by model number and serial number;

(ii) irradiation and decay history to the extent appropriate to demonstrate that its nuclear and thermal characteristics comply with license conditions; and

(iii) any abnormal or unusual condition relevant to radiation safety;

(F) date of the shipment;

(G) for fissile packages and for Type B packages, any special controls exercised;

(H) name and address of the transferee;

(I) address to which the shipment was made; and

(J) results of the determinations required by subsection (1) of this section and by the conditions of the package approval [surveys performed to determine compliance with subsection (4)(9) and (10) of this section].

~~[(2) Each certificate holder shall maintain, for a period of 3 years after the life of the packaging to which they apply, records identifying the packaging by model number, serial number, and date of manufacture.]~~

(2) ~~[(3)]~~ The licensee, certificate holder, and an applicant for a CoC ~~[certificate of compliance (CoC)]~~, shall make available to the department [agency] for inspection, upon reasonable notice, all records required by this section. Records are only valid if stamped, initialed, or signed and dated by authorized personnel, or otherwise authenticated.

(3) ~~[(4)]~~ The licensee, certificate holder, and an applicant for a CoC shall maintain sufficient written records to furnish evidence of the quality of packaging.

(A) The records to be maintained include:

(i) results of the determinations required by subsection (k) of this section;

(ii) design, fabrication, and assembly records;

(iii) results of reviews, inspections, tests, and audits;

(iv) results of monitoring work performance and materials analyses; and

(v) results of maintenance, modification, and repair activities.

(B) Inspection, test, and audit records must identify the:

(i) inspector or data recorder;

(ii) type of observation;

(iii) results;

(iv) acceptability; and

(v) action taken in connection with any deficiencies noted.

(C) These records must be retained for three [3] years after the life of the packaging to which they apply.

(p) Reports. The transporter and shipper shall immediately report by telephone all radioactive waste transportation accidents to the department [agency], at (512) 458-7460, and the local emergency management officials in the county where the radioactive waste accident occurs. All other accidents involving radioactive material shall be reported in accordance with §289.202(xx) and (yy) of this title.

(q) Advance notification of transport of irradiated reactor fuel and certain radioactive waste.

(1) As specified in paragraphs (3) - (5) of this subsection, each licensee shall provide advance notification to the governor of a state, or the governor's designee, of the shipment of radioactive waste, within or across the boundary of the state, before the transport, or delivery to a carrier, for transport, of radioactive waste outside the confines of the licensee's facility or other place of use or storage.

(2) As specified in paragraphs (3) - (5) of this subsection, after June 11, 2013, each licensee shall provide advance notification to the Tribal official of participating Tribes referenced in paragraph (4)(C)(iii) of this subsection, or the official's designee, of the shipment of radioactive waste, within or across the boundary of the Tribe's reservation, before the transport, or delivery to a carrier, for transport, of radioactive waste outside the confines of the licensee's facility or other place of use or storage.

(3) Advanced notification is also required under this subsection for the shipment of licensed radioactive material, other than irradiated fuel, meeting the following three conditions:

(A) the radioactive waste is required by this section to be in Type B packaging for transportation;

(B) the radioactive waste is being transported to or across a state boundary en route to a disposal facility or to a collection point for transport to a disposal facility; and

(C) the quantity of radioactive waste in a single package exceeds the least of the following:

(i) 3,000 times the A_1 value of the radionuclides as specified in subsection (ee) of this section for special form radioactive material;

(ii) 3,000 times the A_2 value of the radionuclides as specified in subsection (ee) of this section for normal form radioactive material; or

(iii) 1,000 terabecquerels (TBq) (27,000 curies (Ci)).

(4) The following are procedures for submitting advance notification:

(A) The notification shall be made in writing to:

(i) the office of each appropriate governor or governor's designee and to the department [agency];

(ii) the office of each appropriate Tribal official or Tribal official's designee; and

(iii) the Director, [~~Division of Security Policy,~~] Office of Nuclear Security and Incident Response.

(B) A notification delivered by mail shall be post-marked at least seven [7] days before the beginning of the seven-day [7-day] period during which departure of the shipment is estimated to occur.

(C) A notification delivered by any other means than mail shall reach the office of the governor or of the governor's designee or the Tribal official or Tribal official's designee at least four [4] days before the beginning of the seven-day [7-day] period during which departure of the shipment is estimated to occur.

(i) A list of the names and mailing addresses of the governors' designees receiving advance notification of transportation of radioactive waste was published in the Federal Register on June 30, 1995 (60 FR 34306).

(ii) Contact information for each state, including telephone and mailing addresses of governors and governors' designees, and participating Tribes, including telephone and mailing addresses of Tribal officials and Tribal official's designees, is available on the NRC website at: <https://scp.nrc.gov/special/designee.pdf>.

(iii) A list of the names and mailing addresses of the governors' designees and Tribal officials' designees of participating Tribes is available on request from the Director, Division of Materials Safety, Security, State, and Tribal Programs, Office of Nuclear Material Safety and Safeguards, United States Nuclear Regulatory Commission, Washington, DC 20555-0001 [~~Director, Division of Intergovernmental Liaison and Rulemaking, Office of Federal and State Materials and Environmental Management Programs, United States Nuclear Regulatory Commission, Washington, DC 20555-0001~~].

(D) The licensee shall [~~make, maintain and~~] retain a copy of the notification for inspection by the department [agency] as a record for three [3] years.

(5) Each advance notification of shipment of irradiated reactor fuel or radioactive waste shall contain the following information:

(A) the name, address, and telephone number of the shipper, carrier, and receiver of the irradiated reactor fuel or radioactive waste shipment;

(B) a description of the irradiated reactor fuel or radioactive waste contained in the shipment, as specified in the regulations of DOT in Title 49, CFR, §172.202 and §172.203(d);

(C) the point of origin of the shipment and the seven-day [7-day] period during which departure of the shipment is estimated to occur;

(D) the seven-day [7-day] period during which arrival of the shipment at state boundaries or Tribal reservation is estimated to occur;

(E) the destination of the shipment, and the seven-day [7-day] period during which arrival of the shipment is estimated to occur; and

(F) a point of contact, with a telephone number, for current shipment information.

(6) A licensee who finds that schedule information previously furnished to a governor or governor's designee or a Tribal official or Tribal official's designee, in accordance with this section, will not be met, shall telephone a responsible individual in the office of the governor of the state or of the governor's designee or the Tribal official or the Tribal official's designee and inform that individual of the extent of the delay beyond the schedule originally reported. The licensee shall maintain a record of the name of the individual contacted for three [3] years.

(7) The following are procedures for a cancellation notice.

(A) Each licensee who cancels an irradiated reactor fuel or radioactive waste shipment for which advance notification has been sent shall send a cancellation notice to the governor of each state or to the governor's designee previously notified, each Tribal official or to the Tribal official's designee previously notified, and to the Director, [~~Division of Security Policy,~~] Office of Nuclear Security and Incident Response, and to the department [agency].

(B) The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being canceled. The licensee shall retain a copy of the notice as a record for three [3] years.

(r) Emergency plan registration requirements.

(1) Each shipper and transporter of radioactive waste shall submit an emergency plan to the department [agency] and receive a registration letter from the department before [agency prior to] initial shipment.

(2) A freight forwarder must submit an emergency plan in order to become a registered freight forwarder.

(3) Each shipper, transporter or freight forwarder applying for registration shall submit a Business Information Form (RC 252-1).

(4) Shipper and freight forwarder registrations expire 10 years from the date of issuance. New documentation to renew the registration must be submitted at least 30 days before [~~prior to~~] the expiration date.

(s) Quality assurance requirements.

(1) Purpose. This subsection describes quality assurance requirements applying to design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, and modification of components of packaging that are important to safety.

(A) Quality Assurance comprises all those planned and systematic actions necessary to provide adequate confidence that a system or component will perform satisfactorily in service.

(B) Quality assurance includes quality control, which comprises those quality assurance actions related to control of the physical characteristics and quality of the material or component to predetermined requirements.

(C) The licensee, certificate holder, and applicant for a CoC are responsible for the following:

(i) the quality assurance requirements as they apply to design, fabrication, testing, and modification of packaging; and

(ii) the quality assurance provision applicable to its use of a packaging for the shipment of licensed material under subsections (s) - (bb) and (ee) of this section.

(2) Establishment of program. Each licensee, certificate holder, and applicant for a CoC shall:

(A) Establish, maintain, and execute a quality assurance program satisfying each of the applicable criteria of this subsection, subsections (s) and (t) of this section and Title 10, CFR, §§71.101 through 71.137 and satisfying any specific provisions that are applicable to the licensee's activities including procurement of packaging; and

(B) Execute the applicable criteria in a graded approach to an extent that is commensurate with the quality assurance requirement's importance to safety.

(3) Approval of program. Before the use of any package for the shipment of licensed material subject to this subsection, each licensee shall:

(A) obtain department [~~agency~~] approval of its quality assurance program; and

(B) file a description of its quality assurance program, including a discussion of which requirements of this subsection and subsections (t) and (u) are applicable and how they will be satisfied.

(4) Radiography containers. A program for transport container inspection and maintenance limited to radiographic exposure devices, source changers, or packages transporting these devices and meeting the requirements of §289.255(m) of this title, is deemed to satisfy the requirements of subsection (i)(1)(B) of this section and paragraph (2) of this subsection.

(t) Quality assurance organization. The licensee, certificate holder, and applicant for a CoC shall (while the term "licensee" is used in these criteria, the requirements are applicable to whatever design, fabricating, assembly, and testing of the package is accomplished with respect to a package before the time a package approval is issued):

(1) be responsible for the establishment and execution of the quality assurance program. The licensee, certificate holder, and applicant for a CoC may delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part of the quality assurance program, but shall retain responsibility for the program; and

(2) clearly establish and delineate, in writing, the authority and duties of persons and organizations performing activities affecting the functions of structures, systems, and components that are important to safety. These activities include performing the functions associated with attaining quality objectives and the quality assurance functions.

(3) establish quality assurance functions as follows:

(A) assuring that an appropriate quality assurance program is established and effectively executed; and

(B) verifying, by procedures such as checking, auditing, and inspection, that activities affecting the functions that are important to safety have been correctly performed.

(4) assure that persons and organizations performing quality assurance functions have sufficient authority and organizational freedom to:

(A) identify quality problems;

(B) initiate, recommend, or provide solutions; and

(C) verify implementation of solutions.

(u) Quality assurance program. A quality assurance program shall be maintained as follows:

(1) The licensee, certificate holder, and applicant for a CoC shall:

(A) establish, at the earliest practicable time consistent with the schedule for accomplishing the activities, a quality assurance program that complies with the requirements of this section and Title 10, CFR, §§71.101 through 71.137;

(B) document the quality assurance program by written procedures or instructions and shall carry out the program in accordance with those procedures throughout the period during which the packaging is used; and

(C) identify the material and components to be covered by the quality assurance program, the major organizations participating in the program, and the designated functions of these organizations.

(2) The licensee, certificate holder, and applicant for a CoC, through its quality assurance program, shall:

(A) provide control over activities affecting the quality of the identified materials and components to an extent consistent with their importance to safety, and as necessary to assure conformance to the approved design of each individual package used for the shipment of radioactive material;

(B) assure that activities affecting quality are accomplished under suitable controlled conditions which include:

(i) the use of appropriate equipment;

(ii) suitable environmental conditions for accomplishing the activity, such as adequate cleanliness; and

(iii) all prerequisites for the given activity have been satisfied; and

(C) take into account the need for special controls, processes, test equipment, tools, and skills to attain the required quality, and the need for verification of quality by inspection and test.

(3) The licensee, certificate holder, and applicant for a CoC shall base the requirements and procedures of its quality assurance program on the following considerations concerning the complexity and proposed use of the package and its components.

(A) The impact of malfunction or failure of the item to safety;

(B) The design and fabrication complexity or uniqueness of the item;

(C) The need for special controls and surveillance over processes and equipment;

(D) The degree to which functional compliance can be demonstrated by inspection or test; and

(E) The quality history and degree of standardization of the item.

(4) The licensee, certificate holder, and applicant for a CoC shall provide for indoctrination and training of personnel performing activities affecting quality, as necessary to assure that suitable proficiency is achieved and maintained.

(5) The licensee, certificate holder, and applicant for a CoC shall review the status and adequacy of the quality assurance program at established intervals. Management of other organizations participating in the quality assurance program shall review regularly the status and adequacy of that part of the quality assurance program they are executing.

(6) Changes to quality assurance program.

(A) Each quality assurance program approval holder shall submit, in accordance with §289.201(k) of this title, a description of a proposed change to its agency-approved quality assurance program that will reduce commitments in the program description as approved by the department [agency]. The quality assurance program approval holder shall not implement the change before receiving agency approval. The description of a proposed change to the agency-approved quality assurance program must identify the change, the reason for the change, and the basis for concluding that the revised program incorporating the change continues to satisfy the applicable requirements of subsections (s) - (bb) of this section.

(B) Each quality assurance program approval holder may change a previously approved quality assurance program without prior agency approval, if the change does not reduce the commitments in the quality assurance program previously approved by the department [agency]. Changes to the quality assurance program that do not reduce the commitments shall be submitted to the department [agency] every 24 months in accordance with §289.201(k) of this title. In addition to quality assurance program changes involving administrative improvements and clarifications, spelling corrections, and non-substantive changes to punctuation or editorial items, the following changes are not considered reductions in commitment:

(i) the use of a quality assurance standard approved by the department [agency] that is more recent than the quality assurance standard in the certificate holder's or applicant's current quality assurance program at the time of the change;

(ii) the use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles, provided that there is no substantive change to either the functions of the position or reporting responsibilities;

(iii) the use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or alternatively, the use of descriptive text, provided that there is no substantive change to the functional relationships, authorities, or responsibilities;

(iv) the elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the quality assurance program approval holder has committed to on record; and

(v) organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

(C) Each quality assurance program approval holder shall maintain records of quality assurance program changes.

(v) Quality control program. Each shipper shall adopt a quality control program to include verification of the following to ensure that shipping containers are suitable for shipments to a licensed disposal facility:

(1) identification of appropriate container(s);

(2) container testing documentation is adequate;

(3) appropriate container used;

(4) container packaged appropriately;

(5) container labeled appropriately;

(6) manifest filled out appropriately; and

(7) documentation maintained of each step.

(w) Handling, storage, and shipping control. The licensee, certificate holder, and applicant for a CoC shall establish measures to control, in accordance with instructions, the handling, storage, shipping, cleaning, and preservation of materials and equipment to be used in packaging to prevent damage or deterioration. When necessary for particular products, special protective environments, such as inert gas atmosphere, and specific moisture content and temperature levels shall be specified and provided.

(x) Inspection, test, and operating status. Measures to track inspection, test and operating status shall be established as follows.

(1) The licensee, certificate holder, and applicant for a CoC shall establish measures to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the packaging. These measures shall provide for the identification of items that have satisfactorily passed required inspections and tests, where necessary to preclude inadvertent bypassing of the inspections and tests; and

(2) The licensee, shall establish measures to identify the operating status of components of the packaging, such as tagging valves and switches, to prevent inadvertent operation.

(y) Nonconforming materials, parts, or components. The licensee, certificate holder, and applicant for a CoC shall establish measures to control materials, parts, or components that do not conform to the licensee's requirements to prevent their inadvertent use or installation. These measures shall include the following, as appropriate:

(1) procedures for identification, documentation, segregation, disposition, and notification to affected organizations; and

(2) nonconforming items shall be reviewed and accepted, rejected, repaired, or reworked in accordance with documented procedures.

(z) Corrective action. The licensee, certificate holder, and applicant for a CoC shall establish measures to assure that conditions adverse to quality, such as deficiencies, deviations, defective material and equipment, and nonconformances, are promptly identified and corrected.

(1) In the case of a significant condition adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

(2) The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management.

(aa) Quality assurance records. The licensee, certificate holder, and applicant for a CoC shall maintain written records sufficient to describe the activities affecting quality for inspection by the department [agency] for three [3] years beyond the date when the licensee, certificate holder, and applicant for a CoC last engage in the activity for which the quality assurance program was developed. If any portion of the written procedures or instructions is superseded, the licensee, certificate holder, and applicant for a CoC shall retain

the superseded material for three [3] years after it is superseded. The records must include the following:

(1) instructions, procedures, and drawings to prescribe quality assurance activities, and closely related specifications such as required qualifications of personnel, procedures, and equipment;

(2) instructions or procedures which establish a records retention program that is consistent with applicable regulations and designates factors such as duration, location, and assigned responsibility; and

(3) changes to the quality assurance program as required by subsection (u)(6) of this section.

(bb) Audits. The licensee, certificate holder, and applicant for a CoC shall carry out a comprehensive system of planned and periodic audits, to verify compliance with all aspects of the quality assurance program, and to determine the effectiveness of the program. The audit program shall include:

(1) performance in accordance with written procedures or checklists by appropriately trained personnel not having direct responsibilities in the area being audited;

(2) documented results that are reviewed by management having responsibility in the area audited; and

(3) follow-up action, including reaudit of deficient areas, shall be taken where indicated.

(cc) Transfer for disposal and manifests.

(1) The requirements of this section and subsection (ff) of this section are designed to:

(A) control transfers of LLRW by any waste generator, waste collector, or waste processor licensee, as defined in this section, who ships LLRW either directly, or indirectly through a waste collector or waste processor, to a licensed LLRW land disposal facility, as defined in §289.201(b) of this title;

(B) establish a manifest tracking system; and

(C) supplement existing requirements concerning transfers and recordkeeping for those wastes.

(2) Beginning March 1, 1998, all affected licensees shall use subsection (ff) of this section.

(3) Each shipment of LLRW intended for disposal at a licensed land disposal facility shall be accompanied by a shipment manifest in accordance with subsection (ff)(1) of this section.

(4) Any licensee shipping LLRW intended for ultimate disposal at a licensed land disposal facility shall document the information required on the uniform manifest and transfer this recorded manifest information to the intended consignee in accordance with subsection (ff) of this section.

(5) Each shipment manifest shall include a certification by the waste generator as specified in subsection (ff)(10) of this section, as appropriate.

(6) Each person involved in the transfer for disposal and disposal of LLRW, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in subsection (ff) of this section, as appropriate.

(7) Any licensee shipping LLRW to a licensed Texas LLRW disposal facility shall comply with the waste acceptance criteria in Title 30, Texas Administrative Code, Part 1, Chapter 336.

(8) Each shipper shall submit a list for approval by the department [agency] of shipping containers that they intend to use to ship LLRW to the Texas LLRW site. If the shipper is licensed in Texas and is the holder of a CoC, the shipper shall also submit written documentation of its program for quality assurance and control and handling, shipping and control measures that comply with the requirements of subsections (s), (t), and (v) - (bb) of this section.

(dd) Fees.

(1) Each shipper shall be assessed a fee for shipments of LLRW originating in Texas or originating out-of-state being shipped to a licensed Texas LLRW disposal facility and these fees shall:

(A) be \$10 per cubic foot of shipped LLRW;

(B) be collected by the department [agency] and deposited to the credit of the department's [agency's] Radiation and Perpetual Care Account;

(C) be used by the department [agency] for emergency planning for and response to transportation accidents involving LLRW, including first responder training in counties through which transportation routes are designated in accordance with this section; and

(D) not be collected on waste disposed of at a federal waste disposal facility.

(2) Fee assessments are suspended from imposition against a party state compact waste generator when the amount in the department's [agency's] Radiation and Perpetual Care Account attributable to those fees reaches \$500,000. If the amount in that account attributable to those fees is reduced to \$350,000 or less, the fee is reinstated until the amount reaches \$500,000.

(3) Money expended from the department's [agency's] Radiation and Perpetual Care Account to respond to accidents involving LLRW shall be reimbursed to the department's [agency's] Radiation and Perpetual Care Account by the responsible shipper or transporter according to this section.

(4) For purposes of this subsection, "shipper" means a person who generates low-level radioactive waste and ships or arranges with others to ship the waste to a disposal site.

(5) This subsection does not relieve a generator from liability for a transportation accident involving LLRW.

(ee) Appendices for determination of A_1 and A_2 .

(1) Values of A_1 and A_2 . Values of A_1 and A_2 for individual radionuclides, which are the bases for many activity limits elsewhere in these rules are given in Table 257-3 of paragraph (6) of this subsection. The curie (Ci) values specified are obtained by converting from the terabecquerel (TBq) value. The TBq values are the regulatory standard. The curie values are for information only and are not intended to be the regulatory standard. Where values of A_1 or A_2 are unlimited, it is for radiation control purposes only. For nuclear criticality safety, some materials are subject to controls placed on fissile material.

(2) Values of radionuclides not listed.

(A) For individual radionuclides whose identities are known, but are not listed in Table 257-3 of paragraph (6) of this subsection, the A_1 and A_2 values contained in Table 257-5 of paragraph (8) of this subsection may be used. Otherwise, the licensee shall obtain prior department [agency] or NRC approval of the A_1 and A_2 values for radionuclides not listed in Table 257-3 of paragraph (6) of this subsection, before shipping the material.

(B) For individual radionuclides whose identities are known, but that are not listed in Table 257-4 of paragraph (7) of this

subsection, the exempt material activity concentration and exempt consignment activity values contained in Table 257-5 of paragraph (8) of this subsection may be used. Otherwise, the licensee shall obtain prior department [agency] or NRC approval of the exempt material activity concentration and exempt consignment activity values, for radionuclides not listed in Table 257-4 of paragraph (7) of this subsection, before shipping the material.

(C) The licensee shall submit requests for prior approval, described in subparagraphs (A) and (B) of this paragraph to the department [agency] or the NRC.

(3) Calculations of A_1 and A_2 for a radionuclide not in Table 257-3 of paragraph (6) of this subsection. In the calculations of A_1 and A_2 for a radionuclide not in Table 257-3 of paragraph (6) of this subsection, a single radioactive decay chain, in which radionuclides are present in their naturally occurring proportions, and in which no daughter radionuclide has a half-life either longer than 10 days, or longer than that of the parent radionuclide, shall be considered as a single radionuclide, and the activity to be taken into account and the A_1 and A_2 value to be applied shall be those corresponding to the parent radionuclide of that chain. In the case of radioactive decay chains in which any daughter radionuclide has a half-life either longer than 10 days, or greater than that of the parent radionuclide, the parent and those daughter radionuclides shall be considered as mixtures of different radionuclides.

(4) Determination for mixtures of radionuclides whose identities and respective activities are known. For mixtures of radionuclides whose identities and respective activities are known, the following conditions apply.

(A) For special form radioactive material, the maximum quantity transported in a Type A package is as follows:
Figure: 25 TAC §289.257(ee)(4)(A) (No change.)

(B) For normal form radioactive material, the maximum quantity transported in a Type A package is as follows:
Figure: 25 TAC §289.257(ee)(4)(B) (No change.)

(C) If the package contains both special and normal form radioactive material, the activity that may be transported in a Type A package is as follows:
Figure: 25 TAC §289.257(ee)(4)(C) (No change.)

(D) Alternatively, an A_1 value for mixtures of special form material may be determined as follows:
Figure: 25 TAC §289.257(ee)(4)(D) (No change.)

(E) Alternatively, an A_2 value for mixtures of normal form material may be determined as follows:
Figure: 25 TAC §289.257(ee)(4)(E) (No change.)

(F) The exempt activity concentration for mixtures of nuclides may be determined as follows:
Figure: 25 TAC §289.257(ee)(4)(F) (No change.)

(G) The activity limit for an exempt consignment for mixtures of radionuclides may be determined as follows:
Figure: 25 TAC §289.257(ee)(4)(G) (No change.)

(5) Determination when individual activities of some of the radionuclides are not known.

(A) When the identity of each radionuclide is known, but the individual activities of some of the radionuclides are not known, the radionuclides may be grouped and the lowest A_1 or A_2 value, as appropriate, for the radionuclides in each group may be used in applying the formulas in paragraph (4) of this subsection. Groups may be based on the total alpha activity and the total beta/gamma activity when these

are known, using the lowest A_1 or A_2 values for the alpha emitters and beta/gamma emitters.

(B) When the identity of each radionuclide is known but the individual activities of some of the radionuclides are not known, the radionuclides may be grouped and the lowest [A] (activity concentration for exempt material) or A (activity limit for exempt consignment) value, as appropriate, for the radionuclides in each group may be used in applying the formulas in paragraph (4) of this subsection. Groups may be based on the total alpha activity and the total beta/gamma activity when these are known, using the lowest [A] or A values for the alpha emitters and beta/gamma emitters, respectively.

(6) A_1 and A_2 values for radionuclides. The following Table 257-3 contains A_1 and A_2 values for radionuclides.
Figure: 25 TAC §289.257(ee)(6) (No change.)

(7) Exempt material activity concentrations and exempt consignment activity limits for radionuclides. The following Table 257-4 contains exempt material activity concentrations and exempt consignment activity limits for radionuclides:
Figure: 25 TAC §289.257(ee)(7) (No change.)

(8) General values for A_1 and A_2 . The following Table 257-5 contains general values for A_1 and A_2 :
Figure: 25 TAC §289.257(ee)(8) (No change.)

(9) Activity-mass relationships for uranium. The following Table 257-6 contains activity-mass relationships for uranium:
Figure: 25 TAC §289.257(ee)(9) (No change.)

(ff) Appendices for the requirements for transfers of LLRW intended for disposal at licensed land disposal facilities and manifests.

(1) Manifest. A waste generator, collector, or processor who transports, or offers for transportation, LLRW intended for ultimate disposal at a licensed LLRW land disposal facility shall prepare a manifest reflecting information requested on applicable NRC Forms 540 (Uniform Low-Level Radioactive Waste Manifest (Shipping Paper)) and 541 (Uniform Low-Level Radioactive Waste Manifest (Container and Waste Description)) and, if necessary, on an applicable NRC Form 542 (Uniform Low-Level Radioactive Waste Manifest (Manifest Index and Regional Compact Tabulation)) or their equivalent. NRC Forms 540 and 540A shall be completed and shall physically accompany the pertinent LLRW shipment. Upon agreement between shipper and consignee, NRC Forms 541, 541A, and 542 and 542A may be completed, transmitted, and stored in electronic media with the capability for producing legible, accurate, and complete records on the respective forms. Licensees are not required by the department [agency] to comply with the manifesting requirements of this section when they ship:

(A) LLRW for processing and expect its return (i.e., for storage in accordance with their license) before [p̄r̄īɔ̄r̄ t̄ɔ̄] disposal at a licensed land disposal facility;

(B) LLRW that is being returned to the licensee who is the waste generator or generator, as defined in this section; or

(C) radioactively contaminated material to a waste processor that becomes the processor's residual waste.

(2) Form instructions. For guidance in completing these forms, refer to the instructions that accompany the forms. Copies of manifests required by this subsection may be legible carbon copies, photocopies, or computer printouts that reproduce the data in the format of the uniform manifest.

(3) Forms. NRC Forms 540, 540A, 541, 541A, 542 and 542A, and the accompanying instructions, in hard copy, may be obtained by writing or calling the Office of the Chief Information

Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone (301) 415-5877; or by visiting the NRC's Web site at <http://www.nrc.gov> and selecting forms from the index found on the NRC home page or at www.nrc.gov/reading-rm/doc-collections/forms/#NRC.

(4) Information requirements of the DOT. This subsection includes information requirements of the DOT, as codified in Title 49, CFR, Part 172. Information on hazardous, medical, or other waste, required to meet EPA regulations, as codified in Title 40, CFR, Parts 259 and 261 or elsewhere, is not addressed in this section, and shall be provided on the required EPA forms. However, the required EPA forms shall accompany the uniform manifest required by this section.

(5) General information. The shipper of the LLRW, shall provide the following information on the uniform manifest:

(A) the name, facility address, and telephone number of the licensee shipping the waste;

(B) an explicit declaration indicating whether the shipper is acting as a waste generator, collector, processor, or a combination of these identifiers for purposes of the manifested shipment; and

(C) the name, address, and telephone number, or the name and EPA identification number for the carrier transporting the waste.

(6) Shipment information. The shipper of the LLRW shall provide the following information regarding the waste shipment on the uniform manifest:

(A) the date of the waste shipment;

(B) the total number of packages/disposal containers;

(C) the total disposal volume and disposal weight in the shipment;

(D) the total radionuclide activity in the shipment;

(E) the activity of each of the radionuclides hydrogen-3, carbon-14, technetium-99, and iodine-129 contained in the shipment; and

(F) the total masses of uranium-233, uranium-235, and plutonium in special nuclear material, and the total mass of uranium and thorium in source material.

(7) Disposal container and waste information. The shipper of the LLRW shall provide the following information on the uniform manifest regarding the waste and each disposal container of waste in the shipment:

(A) an alphabetic or numeric identification that uniquely identifies each disposal container in the shipment;

(B) a physical description of the disposal container, including the manufacturer and model of any high integrity container;

(C) the volume displaced by the disposal container;

(D) the gross weight of the disposal container, including the waste;

(E) for waste consigned to a disposal facility, the maximum radiation level at the surface of each disposal container;

(F) a physical and chemical description of the waste;

(G) the total weight percentage of chelating agent for any waste containing more than 0.1 percent [0.1%] chelating agent by weight, plus the identity of the principal chelating agent;

(H) the approximate volume of waste within a container;

(I) the sorbing or solidification media, if any, and the identity of the solidification media vendor and brand name;

(J) the identities and activities of individual radionuclides contained in each container, the masses of uranium-233, uranium-235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material. For discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed source/devices, and wastes in solidification/stabilization media), the identities and activities of individual radionuclides associated with or contained on these waste types within a disposal container shall be reported;

(K) the total radioactivity within each container; and

(L) for wastes consigned to a disposal facility, the classification of the waste in accordance with §289.202(ggg)(4)(A) of this title. Waste not meeting the structural stability requirements of §289.202(ggg)(4)(B)(ii) of this title shall be identified.

(8) Uncontainerized waste information. The shipper of the LLRW shall provide the following information on the uniform manifest regarding a waste shipment delivered without a disposal container:

(A) the approximate volume and weight of the waste;

(B) a physical and chemical description of the waste;

(C) the total weight percentage of chelating agent if the chelating agent exceeds 0.1 percent [0.1%] by weight, plus the identity of the principal chelating agent;

(D) for waste consigned to a disposal facility, the classification of the waste in accordance with §289.202(ggg)(4)(A) of this title. Waste not meeting the structural stability requirements of §289.202(ggg)(4)(B)(ii) of this title shall be identified;

(E) the identities and activities of individual radionuclides contained in the waste, the masses of uranium-233, uranium-235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material; and

(F) for wastes consigned to a disposal facility, the maximum radiation levels at the surface of the waste.

(9) Multi-generator disposal container information. This paragraph applies to disposal containers enclosing mixtures of waste originating from different generators. (Note: The origin of the LLRW resulting from a processor's activities may be attributable to one or more generators (including waste generators) as defined in this section). It also applies to mixtures of wastes shipped in an uncontainerized form, for which portions of the mixture within the shipment originate from different generators.

(A) For homogeneous mixtures of waste, such as incinerator ash, provide the waste description applicable to the mixture and the volume of the waste attributed to each generator.

(B) For heterogeneous mixtures of waste, such as the combined products from a large compactor, identify each generator contributing waste to the disposal container, and, for discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed source/devices, and wastes in solidification/stabilization media), the identities and activities of individual radionuclides contained on these waste types within the disposal container. For each generator, provide the following:

(i) the volume of waste within the disposal container;

(ii) a physical and chemical description of the waste, including the solidification agent, if any;

(iii) the total weight percentage of chelating agents for any disposal container containing more than 0.1 percent [0.1%] chelating agent by weight, plus the identity of the principal chelating agent;

(iv) the sorbing or solidification media, if any, and the identity of the solidification media vendor and brand name if the media is claimed to meet stability requirements in §289.202(ggg)(4)(B)(ii) of this title; and

(v) radionuclide identities and activities contained in the waste, the masses of uranium-233, uranium-235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material if contained in the waste.

(10) Certification. An authorized representative of the waste generator, processor, or collector shall certify by signing and dating the shipment manifest that the transported materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the DOT and the department [agency]. A collector in signing the certification is certifying that nothing has been done to the collected waste that would invalidate the waste generator's certification.

(11) Control and tracking.

(A) Any licensee who transfers LLRW to a land disposal facility or a licensed waste collector shall comply with the requirements in clauses (i) - (ix) of this subparagraph. Any licensee who transfers waste to a licensed waste processor for waste treatment or repackaging shall comply with the requirements of clauses (iv) - (ix) of this subparagraph. A licensee shall:

(i) prepare all wastes so that the waste is classified according to §289.202(ggg)(4)(A) of this title and meets the waste characteristic requirements in §289.202(ggg)(4)(B) of this title;

(ii) label each disposal container (or transport package if potential radiation hazards preclude labeling of the individual disposal container) of waste to identify whether it is Class A waste, Class B waste, Class C waste, or greater than Class C waste, in accordance with §289.202(ggg)(4)(A) of this title;

(iii) conduct a quality assurance program to assure compliance with §289.202(ggg)(4)(A) and (B) of this title;

(iv) prepare the uniform manifest as required by this subsection;

(v) forward a copy or electronically transfer the uniform manifest to the intended consignee so that either:

(I) receipt of the manifest precedes the LLRW shipment; and

(II) the manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using both subclauses (I) and (II) of this clause are also acceptable;

(vi) include the uniform manifest with the shipment regardless of the option chosen in clause (v) of this subparagraph;

(vii) receive acknowledgement of the receipt of the shipment in the form of a signed copy of the uniform manifest;

(viii) retain a copy of or electronically store the uniform manifest and documentation of acknowledgement of receipt as the record of transfer of radioactive material as required by §289.251 of this title and §289.252 of this title; and

(ix) for any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this subsection, conduct an investigation in accordance with subparagraph (D) of this paragraph.

(B) Any waste collector licensee who handles only prepackaged waste shall:

(i) acknowledge receipt of the waste from the shipper within one week of receipt by returning a signed copy of the uniform manifest;

(ii) prepare a new uniform manifest to reflect consolidated shipments that meet the requirements of this subsection. The waste collector shall ensure that, for each container of waste in the shipment, the uniform manifest identifies the generator of that container of waste;

(iii) forward a copy or electronically transfer the uniform manifest to the intended consignee so that either:

(I) receipt of the uniform manifest precedes the LLRW shipment; or

(II) the uniform manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using both subclauses (I) and (II) of this clause are also acceptable;

(iv) include the uniform manifest with the shipment regardless of the option chosen in clause (iii) of this subparagraph;

(v) receive acknowledgement of the receipt of the shipment in the form of a signed copy of the uniform manifest;

(vi) retain a copy of or electronically store the uniform manifest and documentation of acknowledgement of receipt as the record of transfer of radioactive material as required by §289.251 of this title and §289.252 of this title;

(vii) for any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in accordance with this clause, conduct an investigation in accordance with subparagraph (D) of this paragraph; and

(viii) notify the shipper and the department [agency] when any shipment, or part of a shipment, has not arrived within 60 days after receipt of an advance uniform manifest, unless notified by the shipper that the shipment has been cancelled.

(C) Any licensed waste processor who treats or repackages waste shall:

(i) acknowledge receipt of the waste from the shipper within one week of receipt by returning a signed copy of the uniform manifest;

(ii) prepare a new uniform manifest that meets the requirements of this subsection. Preparation of the new uniform manifest reflects that the processor is responsible for meeting these requirements. For each container of waste in the shipment, the manifest shall identify the waste generators, the preprocessed waste volume, and the other information as required in clause (i) of this subparagraph;

(iii) prepare all wastes so that the waste is classified according to §289.202(ggg)(4)(A) of this title and meets the waste characteristics requirements in §289.202(ggg)(4)(B) of this title;

(iv) label each package of waste to identify whether it is Class A waste, Class B waste, or Class C waste, in accordance with §289.202(ggg)(4)(A) and (C) of this title;

(v) conduct a quality assurance program to assure compliance with §289.202(ggg)(4)(A) and (B) of this title;

(vi) forward a copy or electronically transfer the uniform manifest to the intended consignee so that either:

(I) receipt of the uniform manifest precedes the LLRW shipment; or

(II) the uniform manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using both subclause (I) of this clause and this subclause is also acceptable;

(vii) include the uniform manifest with the shipment regardless of the option chosen in clause (vi) of this subparagraph;

(viii) receive acknowledgement of the receipt of the shipment in the form of a signed copy of the uniform manifest;

(ix) retain a copy of or electronically store the uniform manifest and documentation of acknowledgement of receipt as the record of transfer of radioactive material as required by §289.251 of this title and §289.252 of this title;

(x) for any shipment or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in accordance with this clause, conduct an investigation in accordance with clause (v) of this subparagraph; and

(xi) notify the shipper and the department [agency] when any shipment, or part of a shipment, has not arrived within 60 days after receipt of an advance uniform manifest, unless notified by the shipper that the shipment has been cancelled.

(D) Any shipment or part of a shipment for which acknowledgement is not received within the times set forth in accordance with this section shall undergo the following:

(i) be investigated by the shipper if the shipper has not received notification or receipt within 20 days after transfer; and

(ii) be traced and reported. The investigation shall include tracing the shipment and filing a report with the department [agency]. Each licensee who conducts a trace investigation shall file a written report with the department [agency] within two weeks of completion of the investigation.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Scott A. Merchant

Interim General Counsel

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For further information, please call: (512) 834-6655



CHAPTER 448. STANDARD OF CARE

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes amendments to §448.401, concerning License Required; §448.801, concerning Screening; §448.803, concerning Assessment; and §448.911, concerning Treatment Services Provided by Electronic Means.

BACKGROUND AND PURPOSE

This proposal is necessary to comply with House Bill (H.B.) 4, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules to permit a licensed chemical dependency treatment facility (CDTF) to provide outpatient treatment services to adult and adolescent clients using telecommunications or information technology. H.B. 4 also requires HHSC to adopt rules relating to the minimum standards for CDTFs to provide intakes, screenings, and assessments using telecommunications or information technology.

The proposal is also necessary to implement H.B. 4298, 86th Legislature, Regular Session, 2019, which exempted a satellite office or location operating under the supervision of a licensed outpatient CDTF and providing services within the scope of the outpatient CDTF's license from the requirement to obtain a CDTF license under Texas Health and Safety Code Chapter 464.

The proposal is also necessary to ensure consistency with Texas Health and Safety Code §464.003 by updating the rule language to align with current statute. Senate Bill (S.B.) 219, 84th Legislature, Regular Session, 2015, and S.B. 1314, 85th Legislature, Regular Session, 2017, made non-substantive amendments to §464.003 to update the references for juvenile justice facilities and programs and licensed acute care facilities already exempt from licensure and to use person-first language.

SECTION-BY-SECTION SUMMARY

The proposed amendment to §448.401, License Required, adds language to ensure consistency with Texas Health and Safety Code §464.003 by exempting certain satellite locations or offices from the CDTF license requirement and updates the language to ensure consistency with statute by correcting or outdated references to entities that no longer exist.

The proposed amendment to §448.801, Screening, adds language to implement H.B. 4, which amended Texas Health and Safety Code §462.025, by specifying a licensed facility may provide certain client screenings through electronic means and establishing requirements for conducting those screenings through electronic means.

The proposed amendment to §448.803, Assessment, adds language to implement H.B. 4, which amended Texas Health and Safety Code §462.025, by permitting a licensed facility to provide a client assessment through electronic means and establishing requirements for conducting those assessments through electronic means.

The proposed amendment to §448.911, Treatment Services Provided by Electronic Means, adds language to implement H.B. 4, which added new §462.015 to the Texas Health and Safety Code. The amendment also incorporates language from emergency rules HHSC adopted during the COVID-19 pandemic to allow a licensed CDTF to provide outpatient treatment services through electronic means to adults and adolescents.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rules will be in effect, there will be an estimated loss of revenue to state government as a result of enforcing and administering the rules as proposed. Enforcing or administering the rules does not have foreseeable implications relating to costs or revenues of local government.

The effect on state government for each year of the first five years the proposed rules are in effect is an estimated loss of revenue of \$2,719 General Revenue (GR) and All Funds (AF) in fiscal year (FY) 2022, \$3,625 GR and AF each year in FY 2022 through FY 2026.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rules will be in effect:

- (1) the proposed rules will not create or eliminate a government program;
- (2) implementation of the proposed rules will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rules will result in no assumed change in future legislative appropriations;
- (4) the proposed rules will require a decrease in fees paid to HHSC;
- (5) the proposed rules will not create a new rule;
- (6) the proposed rules will limit existing rules;
- (7) the proposed rules will not change the number of individuals subject to the rules; and
- (8) the proposed rules will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be no adverse economic effect on small businesses, micro-businesses, or rural communities. There will be no adverse economic affect because participation in providing the services by electronic means described in the proposed rules is optional.

LOCAL EMPLOYMENT IMPACT

The proposed rules will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to these rules because the rules are necessary to protect the health, safety, and welfare of the residents of Texas; do not impose a cost on regulated persons; and are necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rules are in effect, the public will benefit from rules that expand treatment services by allowing an outpatient CDTF to provide services through electronic means to adult and adolescent clients. The public will also benefit from rules that establish the criteria for a CDTF to provide screenings and assessments to clients which may alleviate barriers to receiving chemical dependency treatment services within certain rural communities and protect the health and safety of clients. Further, expanding access to treatment and providing patients, stakeholders, and the state protection a safe way to provide treatment services and certain staff training through electronic means through any future disasters. Exempting satellite locations while ensuring they are supervised by a licensed facility may also benefit the public because it allows expanded in-person treatment access.

Trey Wood has also determined that for the first five years the rules are in effect, there are no anticipated economic costs to persons who are required to comply with the proposed rules because participation in providing the services by electronic means described in the proposed rules is optional.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to his or her property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R144" in the subject line.

SUBCHAPTER D. FACILITY LICENSURE INFORMATION

25 TAC §448.401

STATUTORY AUTHORITY

The amendments are authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies; Texas Health and Safety Code Chapter 462, which authorizes the Executive Commissioner to adopt rules governing the treatment of persons with chemical dependencies; and Chapter 464, which authorizes the Executive Commissioner to adopt rules governing the organization and structure, policies and procedures, staffing requirements, services, client rights, records, physical plant requirements, and standards for licensed chemical dependency treatment facilities.

The amendments implement Texas Government Code §531.0055 and Texas Health and Safety Code Chapters 462 and 464.

§448.401. License Required.

(a) A facility providing or offering chemical dependency treatment in Texas shall have a license issued by the Commission unless it is:

- (1) a facility maintained or operated by the Federal government or its agencies;
- (2) a facility directly operated by the State of Texas;
- (3) a facility licensed by the Commission under Texas Health and Safety Code Chapter 241, 243, 248, 466, or 577 [a chemical dependency treatment program approved by the Texas Department of

Health within a licensed general hospital, specialty hospital, or private psychiatric facility];

~~(4) a pharmacotherapy program licensed by the Texas Department of Health;~~

(4) ~~(5)~~ an educational program for intoxicated drivers;

(5) ~~(6)~~ an individual who personally provides counseling or support services to a person with a chemical dependency [~~chemically dependent individuals~~] but does not offer or purport to offer a chemical dependency treatment program;

(6) ~~(7)~~ the private practice of a licensed health care practitioner or licensed chemical dependency counselor who personally renders individual or group services within the scope of the practitioner's license and in the practitioner's office;

(7) ~~(8)~~ a religious organization registered under Texas [Tex.] Health & Safety Code Chapter 464, Subchapter C [Ann. §§464.051-.061 (Vernon 2001 & Supp. 2004)];

(8) ~~(9)~~ a 12-step or similar self-help chemical dependency recovery program:

(A) that does not offer or purport to offer a chemical dependency treatment program;

(B) that does not charge program participants; and

(C) in which program participants may maintain anonymity;~~or]~~

(9) ~~(10)~~ a juvenile justice facility or juvenile justice program, as defined by Texas Family Code §261.405; or [a substance abuse facility or program operating under the standards adopted by the Texas Board of Criminal Justice pursuant to Chapter 509 of the TEXAS GOV'T. CODE (Vernon 1998 & Supp. 2003)]

(10) a satellite office or location in which the person providing services is operating under the supervision of a licensed outpatient care facility and the services delivered at the satellite site fall within the scope of the licensure of the outpatient care facility.

(b) The facility shall have a license for each physical location at which it provides residential services or outpatient services.

(c) A license is not transferable to a separate legal entity or to a different physical address.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

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Karen Ray

Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



SUBCHAPTER H. SCREENING AND ASSESSMENT

25 TAC §448.801, §448.803

STATUTORY AUTHORITY

The amendment are authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies; Texas Health and Safety Code Chapter 462, which authorizes the Executive Commissioner to adopt rules governing the treatment of persons with chemical dependencies; and Chapter 464, which authorizes the Executive Commissioner to adopt rules governing the organization and structure, policies and procedures, staffing requirements, services, client rights, records, physical plant requirements, and standards for licensed chemical dependency treatment facilities.

The amendments implement Texas Government Code §531.0055 and Texas Health and Safety Code Chapters 462 and 464.

§448.801. Screening.

(a) To be eligible for admission to a treatment program, an individual shall meet the DSM criteria for substance abuse or dependence (or substance withdrawal or intoxication in the case of a detoxification program). The facility shall use a screening process appropriate for the target population, individual's age, developmental level, culture and gender which includes the Texas Department of Insurance (TDI) criteria to determine eligibility for admission or referral including an assessment of the client's financial resources and insurance benefits.

(b) The screening process shall collect other information as necessary to determine the type of services that are required to meet the individual's needs. This may necessitate the administration of all or part of validated assessment instruments.

(c) TDI criteria shall guide referral and treatment recommendations as well as placement decisions.

(d) Sufficient documentation shall be maintained in the client record to support the diagnosis and justify the referral/placement decision. Documentation shall include the date of the screening and the signature and credentials of the Qualified Credentialed Counselor (QCC) supervising the screening process.

(e) For admission to a detoxification program, the screening will be conducted by a physician, physician assistant, nurse practitioner, registered nurse, or licensed vocational nurse (LVN). An LVN may conduct a screening under the following conditions:

(1) the LVN has completed detoxification training and demonstrated competency in the detoxification process;

(2) the training and competency verification is documented in the LVN's personnel file;

(3) the LVN shall convey the medical data obtained during the screening process to a physician in person or via telephone. The physician shall determine the appropriateness of the admission and authorize the admission or give instructions for an alternative course of action; and

(4) the physician shall examine the client in person and sign the admission order within 24 hours of authorizing admission.

(f) For admission to all other treatment programs, the screening will be conducted by a counselor or counselor intern.

(g) A detoxification program shall not offer screenings through electronic means.

(h) A treatment program other than a detoxification program may offer screenings in-person and face-to-face, or through electronic means. A facility that offers screenings through electronic means shall comply with the following requirements:

(1) A screening conducted through electronic means shall comply with the requirements under §448.911(b) - (x) of this chapter (relating to Treatment Services Provided by Electronic Means).

(2) The facility shall conduct an in-person and face-to-face screening with an individual at the individual's request.

§448.803. *Assessment.*

(a) A counselor or counselor intern shall conduct and document a comprehensive psychosocial assessment with the client admitted to the facility. The assessment shall document and elicit enough information about the client's past and present status to provide a thorough understanding of the following areas:

- (1) presenting problems resulting in admission;
- (2) alcohol and other drug use;
- (3) psychiatric and chemical dependency treatment;
- (4) medical history and current health status, to include an assessment of Tuberculosis (TB), HIV and other sexually transmitted disease (STD) risk behaviors as permitted by law;
- (5) relationships with family;
- (6) social and leisure activities;
- (7) education and vocational training;
- (8) employment history;
- (9) legal problems;
- (10) mental/emotional functioning; and
- (11) strengths and weaknesses.

(b) The counselor or counselor intern may conduct the assessment with a client in-person and face-to-face, or through electronic means. A facility that offers assessments through electronic means shall comply with the following requirements.

(1) An assessment conducted through electronic means shall comply with the requirements under §448.911(b) - (x) of this chapter (relating to Treatment Services Provided by Electronic Means).

(2) The facility shall conduct an in-person and face-to-face assessment with an individual at the individual's request.

(c) ~~[(b)]~~ The assessment shall result in a comprehensive listing of the client's problems, needs, and strengths.

(d) ~~[(e)]~~ The assessment shall result in a comprehensive diagnostic impression. The diagnostic impression shall include all DSM Axes I, IV, and V at a minimum, and Axes II and III, as allowed by the QCC's license and scope of practice.

(e) ~~[(d)]~~ If the assessment identifies a potential mental health problem, the facility shall obtain a mental health assessment and seek appropriate mental health services when resources for mental health assessments and/or services are available internally or through referral at no additional cost to the program. These services shall be provided by a facility or person authorized to provide such services or a qualified professional as described in §148.901 of this title (relating to Requirements Applicable to all Treatment Services).

(f) ~~[(e)]~~ The assessment shall be signed by a QCC and filed in the client record within three individual service days of admission.

(g) ~~[(f)]~~ The program may accept an evaluation from an outside source if:

- (1) it meets the criteria set forth herein;

(2) it was completed during the 30 days preceding admission or is received directly from a facility that is transferring the client; and

(3) a counselor reviews the information with the client and documents an update.

~~(h) [(g)]~~ For residential clients, a licensed health professional shall conduct a health assessment of the client's physical health status within 96 hours of admission. The facility may accept a health assessment from an outside source completed no more than 30 days before admission or received directly from a transferring facility. If the client has any physical complaints or indications of medical problems, the client shall be referred to a physician, physician assistant, or nurse practitioner for a history and physical examination. The examination, if needed, shall be completed within a reasonable time frame and the results filed in the client record.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Karen Ray

Chief Counsel

Department of State Health Services

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For further information, please call: (512) 834-4591



SUBCHAPTER I. TREATMENT PROGRAM SERVICES

25 TAC §448.911

STATUTORY AUTHORITY

The amendment is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies; Texas Health and Safety Code Chapter 462, which authorizes the Executive Commissioner to adopt rules governing the treatment of persons with chemical dependencies; and Chapter 464, which authorizes the Executive Commissioner to adopt rules governing the organization and structure, policies and procedures, staffing requirements, services, client rights, records, physical plant requirements, and standards for licensed chemical dependency treatment facilities.

The amendment implements Texas Government Code §531.0055 and Texas Health and Safety Code Chapters 462 and 464.

§448.911. *Treatment Services Provided by Electronic Means.*

(a) A licensed treatment program may provide outpatient chemical dependency treatment program services by electronic means provided the criteria outlined in this section are addressed.

(1) Services ~~may [shall]~~ be provided to adult ~~and adolescent~~ clients ~~[only]~~; and

- (2) Services shall be provided by a QCC.

(b) All treatment sessions shall have two forms of access control as follows:

(1) all on-line contact between a QCC and clients must begin with a verification of the client through a name, password or pin number; and

(2) security as detailed in HIPAA.

(c) All data, including audio, video, text and presentation materials shall be transferred using 128 bit-Encryption.

(d) Programs shall maintain compliance with HIPAA and 42 C.F.R. pt. 2.

(e) Programs shall not use e-mail communications containing client identifying information.

(f) Programs shall use audio and video in real time.

(g) Programs shall ensure timely access to individuals qualified in the technology as backup for systems problems.

(h) Programs shall maintain a toll-free telephone number for technical support.

(i) Programs shall develop a contingency plan for clients when technical problems occur during the provision of services.

(j) Programs shall provide a description of all services offered.

(k) Programs shall provide develop criteria, in addition to DSM, to assess clients for appropriateness of utilizing electronic services.

(l) Programs shall provide appropriate referrals for clients who do not meet the criteria for services.

(m) Programs shall develop a grievance procedure and provide a link to the Commission for filing a complaint when using the Internet or the Commission's toll-free number when counseling by telephone.

(n) Prior to clients engaging in Internet services, programs shall describe and provide in writing the potential risks to clients. The risks shall address at a minimum these areas:

(1) clinical aspects;

(2) security; and

(3) confidentiality.

(o) Programs shall create safeguards to ensure appropriate age and identification of the client.

(p) Programs shall maintain information on statutes and regulations of the governing area in which the client resides or is receiving services by electronic means.

(q) Programs shall provide emergency contact information to the client.

(r) Programs shall maintain resource information for the local area of the client.

(s) Programs shall provide reasonable ADA accommodations for clients upon request.

(t) Programs must reside and perform services in Texas.

(u) The Commission maintains the authority to regulate the program regardless of the location of the client.

(v) The Program shall maintain information on statutes and regulations of the governing area in which the client resides or is receiving the Internet services.

(w) Facility shall provide emergency contact information to the client.

(x) Facility shall maintain resource information for the local area of the client.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Karen Ray

Chief Counsel

Department of State Health Services

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CHAPTER 448. STANDARD OF CARE SUBCHAPTER I. TREATMENT PROGRAM SERVICES

25 TAC §448.912

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes new §448.912, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with H.B. 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed new §448.912 adds language prohibiting a chemical dependency treatment facility (CDTF) from discriminating against an organ transplant recipient based on the client's disability and requiring a CDTF to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a client's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will create a new rule;
- (6) the proposed rule will not expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed CDTFs to comply with the provisions of H.B. 119. CDTFs may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 749 licensed CDTFs in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed new rule may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The new rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §464.009, which authorizes the Executive Commissioner to adopt rules governing organization and structure, policies and procedures, staffing requirements, services, client rights, records, physical plant requirements, and standards for licensed CDTFs.

The new rule implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§448.912. Miscellaneous Policies and Protocols.

A licensed chemical dependency treatment facility shall not discriminate based on a client's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103803

Karen Ray

Chief Counsel

Department of State Health Services

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591

TITLE 26. HEALTH AND HUMAN SERVICES

PART 1. HEALTH AND HUMAN SERVICES COMMISSION

CHAPTER 506. SPECIAL CARE FACILITIES

SUBCHAPTER C. OPERATIONAL REQUIREMENTS

26 TAC §506.38

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes new §506.38 concerning, Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed new §506.38 adds language prohibiting a special care facility from discriminating against an organ transplant recipient based on the patient's disability and requiring a special care facility to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed Special Care Facilities to comply with the provisions of H.B. 119. Special Care Facilities may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 11 licensed special care facilities in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rule.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed new rule may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The new rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §248.026, which requires HHSC to adopt rules establishing minimum standards for special care facilities.

The new rule implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§506.38. Miscellaneous Policies and Protocols.

A facility shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103805

Karen Ray

Chief Counsel

Health and Human Services Commission

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 509. FREESTANDING EMERGENCY MEDICAL CARE FACILITIES SUBCHAPTER C. OPERATIONAL REQUIREMENTS

26 TAC §509.68

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes new §509.68, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed new §509.68 adds language prohibiting a free-standing emergency medical care facility (FEMC) from discriminating against an organ transplant recipient based on the patient's disability and requiring an FEMC to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed FEMCs to comply with the provisions of H.B. 119. FEMCs may need to update anti-discrimination policies to comply with H.B. 119's provisions and train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119; however, there are a total of 211 licensed FEMCs in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed new rule may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The new rule is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §254.101, which authorizes HHSC to adopt rules regarding freestanding emergency medical care facilities.

The new rule implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§509.68. *Miscellaneous Policies and Protocols.*

A licensed freestanding emergency medical care facility shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103806

Karen Ray

Chief Counsel

Health and Human Services Commission

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591



CHAPTER 510. PRIVATE PSYCHIATRIC HOSPITALS AND CRISIS STABILIZATION UNITS

SUBCHAPTER C. OPERATIONAL REQUIREMENTS

26 TAC §510.44

The Executive Commissioner of the Texas Health and Human Services Commission (HHSC) proposes an amendment to 26 TAC §510.44, concerning Miscellaneous Policies and Protocols.

BACKGROUND AND PURPOSE

The proposal is necessary to comply with House Bill (H.B.) 119, 87th Legislature, Regular Session, 2021, which requires HHSC to adopt rules prohibiting health care providers from discriminating against an organ transplant recipient based on a patient's or client's disabilities.

SECTION-BY-SECTION SUMMARY

The proposed amendment to §510.44 adds language prohibiting a private psychiatric hospital or crisis stabilization unit (CSU) from discriminating against an organ transplant recipient based on the patient's disability and requiring private psychiatric hospitals and CSUs to comply with Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant. This change is consistent with the provision in H.B. 119 requiring HHSC to adopt rules relating to prohibiting organ transplant recipient discrimination by health care providers based on a patient's disability.

FISCAL NOTE

Trey Wood, HHSC Chief Financial Officer, has determined that for each year of the first five years that the rule will be in effect, there will be an estimated additional cost to local government as a result of enforcing and administering the rule as proposed. Enforcing or administering the rule does not have foreseeable implications relating to costs or revenues of state government.

HHSC lacks the data to provide an estimate of the amounts at this time.

GOVERNMENT GROWTH IMPACT STATEMENT

HHSC has determined that during the first five years that the rule will be in effect:

- (1) the proposed rule will not create or eliminate a government program;
- (2) implementation of the proposed rule will not affect the number of HHSC employee positions;
- (3) implementation of the proposed rule will result in no assumed change in future legislative appropriations;
- (4) the proposed rule will not affect fees paid to HHSC;
- (5) the proposed rule will not create a new rule;
- (6) the proposed rule will expand existing rule;
- (7) the proposed rule will not change the number of individuals subject to the rule; and
- (8) the proposed rule will not affect the state's economy.

SMALL BUSINESS, MICRO-BUSINESS, AND RURAL COMMUNITY IMPACT ANALYSIS

Trey Wood has also determined that there will be an adverse economic effect on small businesses, micro-businesses, or rural communities.

The proposed rule requires licensed Private Psychiatric Hospitals and CSUs to comply with the provisions of H.B. 119. Private Psychiatric Hospitals and CSUs may need to update anti-discrimination policies to comply with H.B. 119's provisions and pos-

sibly train staff on related changes, which could cause facilities to incur costs to comply with the proposed rule.

HHSC is unable to provide an estimate of the number of small businesses and micro businesses affected by H.B. 119, however, there are a total of 61 licensed private psychiatric hospitals and four CSUs in Texas.

LOCAL EMPLOYMENT IMPACT

The proposed rule will not affect a local economy.

COSTS TO REGULATED PERSONS

Texas Government Code §2001.0045 does not apply to this rule because the rule is necessary to protect the health, safety, and welfare of the residents of Texas, and is necessary to implement legislation that does not specifically state that §2001.0045 applies to the rules.

PUBLIC BENEFIT AND COSTS

Stephen Pahl, HHSC Deputy Executive Commissioner for Regulatory Services, has determined that for each year of the first five years the rule is in effect, the public will benefit from the implementation of H.B. 119, which further ensures all patients and clients retain the necessary access to organ transplants and may decrease the occurrence of costly lawsuits and administrative complaints on the basis of organ transplant discrimination in licensed health care facilities and from licensed providers.

Trey Wood has also determined that for the first five years the rule is in effect, businesses required to comply with the proposed rule may incur economic costs because the proposed amendment may require health care facilities to update current policies and procedures and train staff on those changes.

TAKINGS IMPACT ASSESSMENT

HHSC has determined that the proposal does not restrict or limit an owner's right to their property that would otherwise exist in the absence of government action and, therefore, does not constitute a taking under Texas Government Code §2007.043.

PUBLIC COMMENT

Written comments on the proposal may be submitted to the Rules Coordination Office, P.O. Box 13247, Mail Code 4102, Austin, Texas 78711-3247, or street address 4900 North Lamar Boulevard, Austin, Texas 78751; or emailed to HCR_PRT@hhs.texas.gov.

To be considered, comments must be submitted no later than 31 days after the date of this issue of the *Texas Register*. Comments must be: (1) postmarked or shipped before the last day of the comment period; (2) hand-delivered before 5:00 p.m. on the last working day of the comment period; or (3) emailed before midnight on the last day of the comment period. If last day to submit comments falls on a holiday, comments must be postmarked, shipped, or emailed before midnight on the following business day to be accepted. When emailing comments, please indicate "Comments on Proposed Rule 21R145" in the subject line.

STATUTORY AUTHORITY

The amendment is authorized by Texas Government Code §531.0055, which provides that the Executive Commissioner of HHSC shall adopt rules for the operation and provision of services by the health and human services agencies, and Texas Health and Safety Code §577.010, which requires HHSC to adopt rules and standards necessary and appropriate to ensure

the proper care and treatment of patients in a private mental hospital or mental health facility.

The amendment implements Texas Health and Safety Code, Chapter 161, Subchapter S, Allocation of Kidneys and Other Organs Available for Transplant.

§510.44. *Miscellaneous Policies and Protocols.*

(a) Determination of death. The hospital shall adopt, implement, and enforce protocols to be used in determining death which comply with Health and Safety Code (HSC), Title 8, Subtitle A, Chapter 671, Subchapter A (relating to Determination of Death).

(b) Organ and tissue donors. The hospital shall adopt, implement, and enforce a written protocol to identify potential organ and tissue donors which is in compliance with the Texas Anatomical Gift Act, HSC, Chapter 692. The hospital shall make its protocol available to the public during the hospital's normal business hours. The hospital's protocol shall include all requirements in HSC, §692.013 (relating to Hospital Protocol).

(c) Professional nurse reporting and peer review. A facility shall adopt, implement, and enforce a policy to ensure that the facility complies with Occupations Code, §301.401 (relating to Grounds for Reporting Registered Nurse), §301.402 (relating to Duty of Registered Nurse to Report), §301.403 (relating to Duty of Peer Review Committee to Report), §301.404 (relating to Duty of Nursing Educational Program to Report), §301.405 (relating to Duty of Person Employing Registered Nurse to Report), and Chapter 303 (relating to Nursing Peer Review), and with the rules adopted by the Board of Nurse Examiners at 22 Texas Administrative Code, §217.16 (relating to Minor Incidents), §217.19 (relating to Incident-Based Nursing Peer Review) and §217.20 (relating to Safe Harbor Peer Review for RNs).

(d) Discrimination prohibited. A facility shall not discriminate based on a patient's disability and shall comply with Texas Health and Safety Code Chapter 161, Subchapter S (relating to Allocation of Kidneys and Other Organs Available for Transplant).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 27, 2021.

TRD-202103807

Karen Ray

Chief Counsel

Health and Human Services Commission

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 834-4591

TITLE 30. ENVIRONMENTAL QUALITY

PART 1. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 305. CONSOLIDATED PERMITS SUBCHAPTER P. EFFLUENT GUIDELINES AND STANDARDS FOR TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMITS

30 TAC §§305.542 - 305.544

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes new §§305.542 - 305.544.

Background and Summary of the Factual Basis for the Proposed Rules

This rulemaking is being proposed in response to a quadrennial rule review wherein the commission determined that 30 TAC Chapter 308, Subchapters C and J, were obsolete (Non-Rule Project Number 2019-034-308-OW; December 13, 2019, issue of the *Texas Register* (44 TexReg 7718)). Additionally, the executive director identified several rules related to the Texas Pollutant Discharge Elimination System (TPDES) program that would be more appropriately consolidated into Chapter 305, Subchapter P. These rules include 30 TAC Chapters 308, 314, and 315, which contain adoption by reference of federal regulations similar to Chapter 305, Subchapter P. Consolidating these rules would improve the overall organization of TCEQ rules related to the TPDES program.

This rulemaking proposes to adopt by reference federal regulations that were previously adopted by reference in Chapters 308, 314, and 315, except for Chapter 308, Subchapters C and J which were identified as obsolete. Subchapter C in its entirety and Subchapter J as relating to compliance dates will not be re-proposed in this rulemaking. Subchapter J relating to cooling water intakes will be re-proposed in the new rule §305.544. Additionally, this rulemaking proposes to adopt by reference federal regulations related to cooling water intake structures at oil and gas facilities (40 Code of Federal Regulations (CFR) Part 125, Subpart N) that were not previously adopted in Chapter 308 because TCEQ didn't have authority to regulate oil and gas facilities until the United States Environmental Protection Agency (EPA) granted TPDES program authority for wastewater discharges from oil and gas facilities in January 2021. Concurrently with this rulemaking, the commission is proposing to repeal 30 TAC Chapters 308, 314, and 315.

Section by Section Discussion

§305.542. *Pretreatment Standards.*

Proposed new §305.542 would adopt by reference 40 CFR Part 403, as amended, with the following exceptions. The commission is not proposing to adopt 40 CFR §§403.16 or 40 CFR §403.19 because 40 CFR §403.16 is less stringent than 30 TAC §305.535 and 40 CFR §403.19 expired in 2005. Additionally, the proposed rule states that where 40 CFR §403.11 provides procedures for requesting and holding a public hearing, the commission shall instead require notice of and hold a public meeting. Public meetings conducted by the executive director provide an opportunity for public comment and follow the procedures described in 40 CFR §403.11.

The federal regulations in 40 CFR Part 403 establish responsibilities of Federal, State, and local government, industry and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works or which may contaminate sewage sludge.

The federal regulations in 40 CFR Part 403, which were in effect on the date of TPDES program authorization (i.e., September 1998), were previously adopted by reference, as amended, in 30 TAC Chapter 315. EPA amended 40 CFR Part 403 several times after 1998. The proposed rule would adopt by reference the most

current version of 40 CFR Part 403 adopted on November 2, 2020, as amended.

§305.543. *Toxic Pollutant Effluent Standards and Prohibitions.*

Proposed new §305.543 would adopt by reference 40 CFR Part 129, Subpart A, as in effect on the date of TPDES program authorization, as amended. No changes to these federal regulations have been adopted by EPA since the date of TPDES program authorization in September 1998. The federal regulations in 40 CFR Part 129 establish effluent standards or prohibitions for the discharge of toxic pollutants.

§305.544. *Criteria and Standards for Texas Pollutant Discharge Elimination System Permits.*

Proposed new §305.544(1), (2), (4), and (8) would adopt by reference 40 CFR Part 125, Subparts A, B, G, and M, respectively, as each of these subparts were in effect on the date of TPDES program authorization, as amended. No changes to these federal regulations have been adopted by EPA since the date of TPDES program authorization in September 1998.

The federal regulations in 40 CFR Part 125, Subpart A establish criteria and standards for the imposition of technology-based treatment requirements in permits under Clean Water Act (CWA) §301(b), including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under CWA §402(a)(1). 40 CFR Part 125, Subpart B establishes guidelines under CWA §318 and §402 for approval of any discharge of pollutants associated with an aquaculture project. 40 CFR Part 125, Subpart G establishes the criteria to be applied by EPA in acting on CWA §301(h) requests for modifications to the secondary treatment requirements. It also establishes special permit conditions which must be included in any permit incorporating a CWA §301(h) modification of the secondary treatment requirements. 40 CFR Part 125, Subpart M establishes guidelines for issuance of permits for the discharge of pollutants from a point source into the territorial seas, the contiguous zone, and the oceans.

Proposed new §305.544(3) would adopt by reference 40 CFR Part 125, Subpart D, as amended. The federal regulations in 40 CFR Part 125, Subpart D establish the criteria and standards to be used in determining whether effluent limitations alternative to those required by promulgated EPA effluent limitations guidelines under CWA §301 and §304 (referred to as "national limits") should be imposed on a discharger because factors relating to the discharger's facilities, equipment, processes or other factors related to the discharger are fundamentally different from the factors considered by EPA in development of the national limits.

The federal regulations in 40 CFR Part 125, Subpart D, which were in effect on the date of TPDES program authorization (i.e. September 1998), were previously adopted by reference, as amended, in 30 TAC Chapter 308. EPA amended 40 CFR Part 125, Subpart D after 1998. The proposed rule would adopt by reference the most current version of 40 CFR Part 125, Subpart D adopted on May 15, 2000, as amended.

Proposed new §305.544(5) would adopt by reference 40 CFR Part 125, Subpart H, as amended. The federal regulations in 40 CFR Part 125, Subpart H describes the factors, criteria and standards for the establishment of alternative thermal effluent limitations under CWA, §316(a) in permits issued under CWA §402(a).

The federal regulations in 40 CFR Part 125, Subpart H, which were in effect on the date of TPDES program authorization (i.e.,

September 1998), were previously adopted by reference, as amended, in 30 TAC Chapter 308. EPA amended 40 CFR Part 125, Subpart H after 1998. The proposed rule would adopt by reference the most current version of 40 CFR Part 125, Subpart H adopted on May 15, 2000, as amended.

Proposed new §305.544(6) would adopt by reference 40 CFR Part 125, Subpart I, as amended. The federal regulations in 40 CFR Part 125, Subpart I establish requirements that apply to the location, design, construction, and capacity of cooling water intake structures at new facilities. The term "new facility" is defined in 40 CFR §125.83.

The federal regulations in 40 CFR Part 125, Subpart I, which were in effect on the date of TPDES program authorization (i.e., September 1998), were previously adopted by reference, as amended, in 30 TAC Chapter 308. EPA amended 40 CFR Part 125, Subpart I after 1998. The proposed rule would adopt by reference the most current version of 40 CFR Part 125, Subpart I adopted on August 15, 2014, as amended.

Proposed new §305.544(7) would adopt by reference 40 CFR Part 125, Subpart J, as amended. The federal regulations in 40 CFR Part 125, Subpart J establish the requirements that apply to cooling water intake structures at existing facilities. The term "existing facility" is defined in 40 CFR §125.92.

The federal regulations in 40 CFR Part 125, Subpart J, which were in effect on the date of TPDES program authorization (i.e., September 1998), were previously adopted by reference, as amended, in 30 TAC Chapter 308. EPA repealed 40 CFR Part 125, Subpart J after 1998 and subsequently adopted new regulations in 40 CFR Part 125, Subpart J. The proposed rule would adopt by reference the most current version of 40 CFR Part 125, Subpart J adopted on August 15, 2014, as amended.

Proposed new §305.544(9) would adopt by reference 40 CFR Part 125, Subpart N, as amended. The federal regulations in 40 CFR Part 125, Subpart N establish requirements that apply to the location, design, construction, and capacity of cooling water intake structures at new offshore oil and gas extraction facilities. The term "new offshore oil and gas extraction facility" is defined in 40 CFR §125.92. The proposed rule would adopt by reference the current version of 40 CFR Part 125, Subpart N adopted on June 16, 2006, as amended.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, has determined that for the first five-year period that the proposed new rules would be in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed rules.

Public Benefits and Costs

Ms. Bearse determined that for each year of the first five years the proposed new rules would be in effect, the public benefit anticipated would be improved readability with the removal of obsolete provisions, consolidation of the rules governing the TPDES program, and compliance with the Memorandum of Agreement between the agency and the EPA regarding the same program.

The proposed rulemaking is not anticipated to result in fiscal implications for businesses or individuals. The proposed rulemaking contains a reference to 40 CFR Part 125, Subpart N, which should not create a new fiscal impact because regulated entities were required to submit to federal regulations prior to the EPA

granting TPDES program authority for wastewater discharges from oil and gas facilities.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking would not adversely affect a local economy in a material way for the first five years that the proposed new rules would be in effect.

Rural Community Impact Statement

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking would not adversely affect rural communities in a material way for the first five years that the proposed new rules would be in effect. The new rules would apply statewide and have the same effect in rural communities as in urban communities.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rulemaking for the first five-year period that the proposed new rules would be in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed rulemaking would not adversely affect a small or micro-business in a material way for the first five years that the proposed new rules would be in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking would not create or eliminate a government program and would not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking would not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking would not create, expand, repeal or limit an existing regulation, nor would the proposed rulemaking increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed new rules should not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to Texas Government Code, §2001.0225, because it does not meet the criteria for a "Major environmental rule" as defined in that statute. A "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Chapter 308, Subchapters A, B, D, G, H, I, and M that are proposed for repeal would be re-proposed within Chapter 305, Subchapter P in proposed new §§305.542 - 305.544 to improve the overall organization of TCEQ rules related to the TPDES program. This rulemaking is also being proposed in response to a quadrennial rule review wherein the commission determined that

Chapter 308, Subchapters C and J were obsolete. Subchapter C in its entirety and Subchapter J as relating to compliance dates will not be re-proposed in this rulemaking. Subchapter J relating to cooling water intakes will be re-proposed in the new §305.544. In addition, the proposed rulemaking would adopt by reference 40 CFR Part 125, Subpart N that was not previously adopted in Chapter 308. Therefore, it is not anticipated that the proposed new rules would adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The commission concludes that the proposed new rules do not meet the definition of a "Major environmental rule."

Furthermore, even if the proposed new rules did meet the definition of a major environmental rule, the proposed new rules would not be subject to Texas Government Code, §2001.0225, because they do not meet any of the four applicable requirements specified in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225(a), applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The proposed new rules of §§305.542-305.544 would not cause any of the results listed in Texas Government Code, §2001.0225(a).

Under Texas Government Code, §2001.0225, only a major environmental rule requires a regulatory impact analysis. Because the proposed new rules would not constitute a major environmental rule, a regulatory impact analysis is not required.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission evaluated the proposed rulemaking and performed an assessment of whether the proposed rulemaking constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of the proposed action is to consolidate rules from Chapters 308 (with the exception of Subchapters C and J), 314, and 315 into Chapter 305, Subchapter P. Consolidating these rules would improve the overall organization of TCEQ rules related to the TPDES program. In addition, the proposed rulemaking would adopt by reference 40 CFR Part 125, Subpart N, that was not previously adopted in Chapter 308. The proposed rulemaking would substantially advance this stated purpose. Promulgation and enforcement of this proposed rulemaking would be neither a statutory nor a constitutional taking of private real property because the proposed rulemaking would not affect real property.

In particular, there are no burdens imposed on private real property, and the proposed rulemaking would consolidate rules for the purpose of improving organization of TCEQ rules related to the TPDES program. Because the proposed rulemaking would not affect real property, it would not burden, restrict, or limit an owner's right to property or reduce its value by 25% or more beyond that which would otherwise exist in the absence of the proposed new rules. Therefore, this proposed rulemaking would

not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed new rules in accordance with Coastal Coordination Act implementation rules, 31 TAC §505.22, and found the proposed rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the proposed rulemaking includes protecting, preserving, restoring, and enhancing the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs); and ensuring sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applicable to the proposed rulemaking include policies for discharges of wastewater.

The proposed rulemaking is consistent with the above goals and policies by requiring wastewater discharges to comply with federal regulations established to protect water resources.

Promulgation and enforcement of the new rules would not violate or exceed any standards identified in the applicable CMP goals and policies because the proposed rules would be consistent with these CMP goals and policies and the rules would not create or have a direct or significant adverse effect on any CNRAs.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on November 9, 2021, at 10:00 a.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by November 8, 2021. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on November 8, 2021, to those who register for the hearing.

For the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YT-RIMmM0YjEtMzcyNy00MjMyLTK0MGQtZDc0ODA1NDImMW-Zl%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Cecilia Mena, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2021-020-305-OW. The comment period closes on November 9, 2021. Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Ms. Laurie Fleet, Water Quality Division at (512) 239-5445.

Statutory Authority

The rulemaking is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; and TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies, and to protect water quality in the state.

The proposed new rules implement TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, and 26.011.

§305.542. Pretreatment Standards.

40 Code of Federal Regulations (CFR) Part 403 (Federal Register, Volume 85, November 2, 2020), as amended, is adopted by reference, except 40 CFR §403.16 and §403.19, and except where 40 CFR §403.11 provides procedures for requesting and holding a public hearing, the commission shall instead require notice of and hold a public meeting. Such a public meeting shall be conducted by the executive director, shall be an opportunity for public comment, and shall otherwise follow the procedures described in 40 CFR §403.11.

§305.543. Toxic Pollutant Effluent Standards and Prohibitions.

Except to the extent that it is less stringent than the Texas Water Code or the rules of the commission, 40 Code of Federal Regulations Part 129, Subpart A, as in effect on the date of TPDES program authorization, as amended, is adopted by reference.

§305.544. Criteria and Standards for Texas Pollutant Discharge Elimination System Permits.

Except to the extent that they are less stringent than the Texas Water Code or the rules of the commission, the following federal regulations are adopted by reference, as amended:

(1) 40 Code of Federal Regulations (CFR) Part 125, Subpart A, relating to imposing technology-based treatment requirements, as in effect on the date of Texas Pollutant Discharge Elimination System (TPDES) program authorization;

(2) 40 CFR Part 125, Subpart B, relating to issuance of permits to aquaculture projects, as in effect on the date of TPDES program authorization;

(3) 40 CFR Part 125, Subpart D, relating to determining fundamentally different factors (*Federal Register*, Volume 65, May 15, 2000);

(4) 40 CFR Part 125, Subpart G, relating to modifying the secondary treatment requirements, as in effect on the date of TPDES program authorization;

(5) 40 CFR Part 125, Subpart H, relating to determining alternative effluent limitations (*Federal Register*, Volume 65, May 15, 2000);

(6) 40 CFR Part 125, Subpart I, relating to cooling water intake structures for new facilities (*Federal Register*, Volume 79, August 15, 2014);

(7) 40 CFR Part 125, Subpart J, relating to relating to cooling water intake structures for existing facilities (*Federal Register*, Volume 79, August 15, 2014);

(8) 40 CFR Part 125, Subpart M, relating to ocean discharges, as in effect on the date of TPDES program authorization; and

(9) 40 CFR Part 125, Subpart N, relating to cooling water intake structures for new offshore oil and gas extraction facilities (*Federal Register*, Volume 71, June 16, 2006).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103753

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 239-2809



CHAPTER 308. CRITERIA AND STANDARDS FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes to repeal §§308.1, 308.21, 308.31, 308.41, 308.71, 308.81, 308.91, 308.101, and 308.141.

Background and Summary of the Factual Basis for the Proposed Rules

This rulemaking is being proposed in response to a quadrennial rule review wherein the commission determined that 30 TAC Chapter 308 Subchapters C and J were obsolete (Non-Rule Project Number 2019-034-308-OW; December 13, 2019, issue of the *Texas Register* (44 TexReg 7718)). Additionally, the executive director identified several rules related to the Texas

Pollutant Discharge Elimination System (TPDES) program that would be more appropriately consolidated into 30 TAC Chapter 305, Subchapter P. These rules include 30 TAC Chapters 308, 314, and 315, which contain adoption by reference of federal regulations similar to 30 TAC Chapter 305, Subchapter P. Consolidating these rules would improve the overall organization of TCEQ rules related to the TPDES program.

This rulemaking proposes to repeal Chapter 308. Concurrently with this rulemaking, the commission is proposing new §305.544 to adopt by reference federal regulations that were previously adopted by reference in Chapter 308, except Subchapters C and J which were determined to be obsolete. Subchapter C in its entirety and Subchapter J as relating to compliance dates will not be re-proposed. Subchapter J relating to cooling water intakes will be re-proposed in the new rule §305.544.

Section by Section Discussion

The commission proposes to repeal §§308.1, 308.21, 308.31, 308.41, 308.71, 308.81, 308.91, 308.101, and 308.141. These sections adopt by reference federal regulations in 40 Code of Federal Regulations (CFR) Part 125. In a concurrent rulemaking, the commission is proposing new §305.544 to adopt by reference 40 CFR Part 125.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, has determined that for the first five-year period that the proposed repeals would be in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed repeals.

Public Benefits and Costs

Ms. Bearse determined that for each year of the first five years the proposed repeals would be in effect, the public benefit anticipated would be improved readability with the repeal of obsolete rules and the consolidation of the rules governing the TPDES program.

The proposed rulemaking is not anticipated to result in fiscal implications for businesses or individuals. This rulemaking proposes to repeal Chapter 308. Concurrently with this rulemaking, the commission is proposing new §305.544 to adopt by reference the federal regulations that were previously adopted by reference in Chapter 308. The proposed rulemaking removes the content of Subchapters C and J, which were determined to be obsolete.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking would not adversely affect a local economy in a material way for the first five years that the proposed repeals would be in effect.

Rural Community Impact Statement

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking would not adversely affect rural communities in a material way for the first five years that the proposed repeals would be in effect. The repeals would apply statewide and have the same effect in rural communities as in urban communities.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rulemaking for the first five-year period that the proposed repeals would be in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed rulemaking would not adversely affect a small or micro-business in a material way for the first five years that the proposed repeals would be in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking would not create or eliminate a government program and would not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking would not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking would not create, expand, repeal or limit an existing regulation, nor would the proposed rulemaking increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed repeals should not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed repeals in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the repeals are not subject to Texas Government Code, §2001.0225, because they do not meet the criteria for a "Major environmental rule" as defined in that statute. A "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Chapter 308 Subchapters A, B, D, G, H, I, and M are proposed for repeal because the executive director has identified them as one of several rules related to the TPDES that would be more appropriately consolidated into Chapter 305, Subchapter P. Chapter 308 contains adoption by reference of federal regulations, similar to Chapter 305, Subchapter P. Consolidation would improve the overall organization of TCEQ rules related to the TPDES program. This rulemaking is also being proposed in response to a quadrennial rule review wherein the commission determined that Chapter 308 Subchapters C and J were obsolete. Therefore, it is not anticipated that the proposed repeals would adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The commission concludes that the proposed repeals do not meet the definition of a "Major environmental rule."

Furthermore, even if the proposed repeals did meet the definition of a major environmental rule, the proposed repeals would not be subject to Texas Government Code, §2001.0225, because they do not meet any of the four applicable requirements specified in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225(a) applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an

express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The proposed repeals of §§308.1, 308.21, 308.31, 308.41, 308.71, 308.81, 308.91, 308.101, and 308.141 would not cause any of the results listed in Texas Government Code, §2001.0225(a).

Under Texas Government Code, §2001.0225, only a major environmental rule requires a regulatory impact analysis. Because the proposed repeals would not constitute a major environmental rule, a regulatory impact analysis is not required.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission evaluated the proposed repeals and performed an assessment of whether the proposed repeals constitute a taking under Texas Government Code, Chapter 2007. The specific purpose of the proposed action is to repeal rules that would be more appropriately consolidated into Chapter 305, Subchapter P. Chapter 314 contains adoption by reference of federal regulations, similar to Chapter 305, Subchapter P. Consolidation would improve the overall organization of TCEQ rules related to the TPDES program. In addition, this rulemaking is also being proposed in response to a quadrennial rule review wherein the commission determined that Chapter 308, Subchapters C and J were obsolete. These subchapters will not be re-proposed or consolidated into Chapter 305, Subchapter P. The proposed repeals would substantially advance these stated purposes. Promulgation and enforcement of these proposed repeals would be neither a statutory nor a constitutional taking of private real property because the proposed repeals would not affect real property.

In particular, there are no burdens imposed on private real property, and the proposed repeals would eliminate both unnecessary rules and obsolete rules. Because the repeals would not affect real property, they would not burden, restrict, or limit an owner's right to property or reduce its value by 25% or more beyond that which would otherwise exist in the absence of the repeals. Therefore, these proposed repeals would not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed repeal in accordance with Coastal Coordination Act implementation rules, 31 TAC §505.22 and found the proposed rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the proposed rulemaking includes protecting, preserving, restoring, and enhancing the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs); and ensuring sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applica-

ble to the proposed rulemaking includes policies for discharges of wastewater.

The proposed rulemaking is consistent with the above goals and policies by requiring wastewater discharges to comply with federal regulations established to protect water resources.

Promulgation and enforcement of the rulemaking would not violate or exceed any standards identified in the applicable CMP goals and policies because the proposed rules would be consistent with these CMP goals and policies and the rulemaking would not create or have a direct or significant adverse effect on any CNRAs.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on November 9, 2021, at 10:00 a.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by November 8, 2021. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on November 8, 2021, to those who register for the hearing.

For the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YT-RIMmMOYjEtMzcyNy00MjMyLTk0MGQkZDc0ODA1NDlmMW-Zl%40thread.v2/0?context=%7b%22id%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22oid%22%3a-%2230ec010b-ff0b-4618-bbc4-622a14f9cb18%22%2c%22Is-BroadcastMeeting%22%3atrue%7d&btype=a&role=a

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Cecilia Mena, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2021-020-305-OW. The comment period closes on November 9, 2021. Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For

further information, please contact Ms. Laurie Fleet, Water Quality Division, at (512) 239-5445.

SUBCHAPTER A. CRITERIA AND STANDARDS FOR IMPOSING TECHNOLOGY-BASED TREATMENT REQUIREMENTS

30 TAC §308.1

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.1. Criteria and Standards for Imposing Technology-based Treatment Requirements under the Clean Water Act, §301(b) and §402.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103758

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 239-2809



SUBCHAPTER B. CRITERIA FOR ISSUANCE OF PERMITS TO AQUACULTURE PROJECTS

30 TAC §308.21

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws

of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.21. Criteria for Issuance of Permits to Aquaculture Projects.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103759

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 239-2809



SUBCHAPTER C. CRITERIA AND EXTENDING COMPLIANCE DATES FOR FACILITIES INSTALLING INNOVATIVE TECHNOLOGY UNDER THE CLEAN WATER ACT, §301(K)

30 TAC §308.31

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.31. Criteria for Extending Compliance Dates for Facilities Installing Innovative Technology under the Clean Water Act, §301(k).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-2809

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SUBCHAPTER D. CRITERIA AND STANDARDS FOR DETERMINING FUNDAMENTALLY DIFFERENT FACTORS UNDER THE CLEAN WATER ACT, §301(B)(1)(A), (B)(2)(A), AND (E)

30 TAC §308.41

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.41. *Criteria for Standards for Determining Fundamentally Different Factors under the Clean Water Act, §301(b)(1)(A), (2)(A), and (E).*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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For further information, please call: (512) 239-2809

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SUBCHAPTER G. CRITERIA FOR MODIFYING THE SECONDARY TREATMENT

30 TAC §308.71

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.71. *Criteria for Modifying the Secondary Treatment Requirements under the Clean Water Act, §301(h).*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-2809

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SUBCHAPTER H. CRITERIA FOR DETERMINING ALTERNATIVE EFFLUENT LIMITATIONS UNDER THE CLEAN WATER ACT, §316(A)

30 TAC §308.81

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws

of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.81. Criteria for Determining Alternative Effluent Limitations under the Clean Water Act, §316(a).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-2809



SUBCHAPTER I. CRITERIA APPLICABLE TO COOLING WATER INTAKE STRUCTURES UNDER CLEAN WATER ACT, §316(b)

30 TAC §308.91

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.91. Criteria Applicable to Cooling Water Intake Structures under the Clean Water Act, §316(b).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-2809



SUBCHAPTER J. CRITERIA FOR EXTENDING COMPLIANCE DATES UNDER THE CLEAN WATER ACT, §301(I)

30 TAC §308.101

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.101. Criteria for Extending Compliance Dates under the Clean Water Act, §301(i).

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-2809



SUBCHAPTER M. OCEAN DISCHARGE CRITERIA

30 TAC §308.141

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§308.141. *Ocean Discharge Criteria.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-2809



CHAPTER 314. TOXIC POLLUTANT EFFLUENT STANDARDS

30 TAC §314.1

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes to repeal §314.1.

Background and Summary of the Factual Basis for the Proposed Rule

The executive director identified several rules related to the Texas Pollutant Discharge Elimination System (TPDES) program that would be more appropriately consolidated into 30 TAC Chapter 305, Subchapter P. These rules include 30 TAC Chapters 308, 314, and 315, which contain adoption by reference of federal regulations, similar to 30 TAC Chapter 305, Subchapter P. Consolidating these rules would improve the overall organization of TCEQ rules related to the TPDES program.

This rulemaking proposes to repeal 30 TAC Chapter 314. Concurrently with this rulemaking, the commission is proposing new 30 TAC §305.543 to adopt by reference federal regulations that were previously adopted by reference in 30 TAC Chapter 314.

Section Discussion

The commission proposes to repeal §314.1, which adopts by reference federal regulations in 40 Code of Federal Regulations

(CFR) Part 129. In a concurrent rulemaking, the commission is proposing new §305.543 to adopt by reference 40 CFR Part 129.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, has determined that for the first five-year period that the proposed repeal would be in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed repeal.

Public Benefits and Costs

Ms. Bearse determined that for each year of the first five years the proposed repeal would be in effect, the public benefit anticipated would be improved readability with the consolidation of the rules governing the TPDES program.

The proposed rulemaking is not anticipated to result in fiscal implications for businesses or individuals. This rulemaking proposes to repeal Chapter 314, and concurrently with this rulemaking, the commission is proposing new §305.543 to adopt by reference federal regulations that were previously adopted by reference in Chapter 314.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking would not adversely affect a local economy in a material way for the first five years that the proposed repeal would be in effect.

Rural Community Impact Statement

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking would not adversely affect rural communities in a material way for the first five years that the proposed repeal would be in effect. The rulemaking would apply statewide and have the same effect in rural communities as in urban communities.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rulemaking for the first five-year period that the proposed repeal would be in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed repeal would not adversely affect a small or micro-business in a material way for the first five years that the proposed repeal would be in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking would not create or eliminate a government program and would not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking would not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking would repeal an existing regulation. The proposed rulemaking would not increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed repeal should not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed repeal in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the repeal is not subject to Texas Government Code, §2001.0225 because it does not meet the criteria for a "Major environmental rule" as defined in that statute. A "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Chapter 314 is proposed for repeal because the executive director has identified it as one of several rules related to the TPDES that would be more appropriately consolidated into Chapter 305, Subchapter P. Chapter 314 contains adoption by reference of federal regulations, similar to Chapter 305, Subchapter P. Consolidation would improve the overall organization of TCEQ rules related to the TPDES program. Therefore, it is not anticipated that the proposed repeal would adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The commission concludes that the proposed repeal does not meet the definition of a "Major environmental rule."

Furthermore, even if the proposed repeal did meet the definition of a major environmental rule, the proposed repeal is not subject to Texas Government Code, §2001.0225, because it does not meet any of the four applicable requirements specified in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225(a) applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The proposed repeal of §314.1 will not cause any of the results listed in Texas Government Code, §2001.0225(a).

Under Texas Government Code, §2001.0225, only a major environmental rule requires a regulatory impact analysis. Because the proposed repeal would not constitute a major environmental rule, a regulatory impact analysis is not required.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission evaluated the proposed repeal and performed an assessment of whether the proposed repeal constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of the proposed action is to repeal a rule that would be more appropriately consolidated into Chapter 305, Subchapter P. Chapter 314 contains adoption by reference of federal regulations, similar to Chapter 305, Subchapter P. Consolidation would improve the overall organization of TCEQ rules related to the TPDES program. The proposed repeal would substantially advance this stated purpose. Promulgation and enforcement of this proposed repeal would be neither a statutory nor a constitu-

tional taking of private real property because the proposed repeal would not affect real property.

In particular, there are no burdens imposed on private real property, and the proposed repeal would eliminate an unnecessary rule that would be re-proposed and consolidated in Chapter 305, Subchapter P. Because the proposed repeal would not affect real property, it would not burden, restrict, or limit an owner's right to property or reduce its value by 25% or more beyond that which would otherwise exist in the absence of the proposed repeal. Therefore, this proposed repeal would not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed repeal in accordance with Coastal Coordination Act implementation rules, 31 TAC §505.22 and found the proposed rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the proposed rulemaking includes protecting, preserving, restoring, and enhancing the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs); and ensuring sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applicable to the proposed rulemaking includes policies for discharges of wastewater.

The proposed rulemaking is consistent with the above goals and policies by requiring wastewater discharges to comply with federal regulations established to protect water resources.

Promulgation and enforcement of the repeal would not violate or exceed any standards identified in the applicable CMP goals and policies because the proposed repeal is consistent with these CMP goals and policies and the repeal would not create or have a direct or significant adverse effect on any CNRAs.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on November 9, 2021, at 10:00 a.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by November 8, 2021. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the

hearing will be sent on November 8, 2021, to those who register for the hearing.

For the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YTRIMmMOYjEtMzcyNy00MjMyLTk0MGQtZDc0ODA1NDImMW-ZI%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%2230ec010b-ff0b-4618-bbc4-622a14f9cb18%22%2c%22Is-BroadcastMeeting%22%3atrue%7d&btype=a&role=a

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Cecilia Mena, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2021-020-305-OW. The comment period closes on November 9, 2021. Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Ms. Laurie Fleet, Water Quality Division, at (512) 239-5445.

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§314.1. Toxic Pollutant Effluent Standards and Prohibitions.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division
Texas Commission on Environmental Quality

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CHAPTER 315. PRETREATMENT REGULATIONS FOR EXISTING AND NEW SOURCES OF POLLUTION

SUBCHAPTER A. GENERAL PRETREATMENT REGULATIONS FOR EXISTING AND NEW SOURCES OF POLLUTION

30 TAC §315.1

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes to repeal §315.1.

Background and Summary of the Factual Basis for the Proposed Rule

The executive director identified several rules related to the Texas Pollutant Discharge Elimination System (TPDES) program that would be more appropriately consolidated into 30 TAC Chapter 305, Subchapter P. These rules include 30 TAC Chapters 308, 314, and 315, which contain adoption by reference of federal regulations, similar to 30 TAC Chapter 305, Subchapter P. Consolidating these rules would improve the overall organization of TCEQ rules related to the TPDES program.

This rulemaking proposes to repeal Chapter 315. Concurrently with this rulemaking, the commission is proposing new §305.542 to adopt by reference federal regulations that were previously adopted by reference in Chapter 315.

Section Discussion

The commission proposes to repeal §315.1 which adopts by reference federal regulations in 40 Code of Federal Regulations (CFR) Part 403. In a concurrent rulemaking, the commission is proposing new §305.543 to adopt by reference 40 CFR Part 403.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, has determined that for the first five-year period the proposed repeal would be in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed repeal.

Public Benefits and Costs

Ms. Bearse determined that for each year of the first five years the proposed repeal would be in effect, the public benefit anticipated would be improved readability with the consolidation of the rules governing the TPDES program.

The proposed rulemaking is not anticipated to result in fiscal implications for businesses or individuals. This rulemaking proposes to repeal Chapter 315, and concurrently with this rulemaking, the commission is proposing new §305.542 to adopt by reference federal regulations that were previously adopted by reference in Chapter 315.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking would not adversely affect a local economy in a material way for the first five years that the proposed repeal would be in effect.

Rural Community Impact Statement

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking would not adversely affect rural communities in a material way for the first five years that the proposed repeal would be in effect. The repeal would apply statewide and have the same effect in rural communities as in urban communities.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed repeal for the first five-year period the proposed repeal would be in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed repeal would not adversely affect a small or micro-business in a material way for the first five years the proposed repeal would be in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking would not create or eliminate a government program and would not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking would not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking would not create, expand, repeal or limit an existing regulation, nor would the proposed rulemaking increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed repeal should not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed repeal in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the repeal is not subject to Texas Government Code, §2001.0225 because it does not meet the criteria for a "Major environmental rule" as defined in that statute. A "Major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Chapter 315 is proposed for repeal because the executive director has identified it as one of several rules related to the TPDES that would be more appropriately consolidated into Chapter 305, Subchapter P. Chapter 315 contains adoption by reference of federal regulations, similar to Chapter 305, Subchapter P. Consolidation would improve the overall organization of TCEQ rules related to the TPDES program. Therefore, it is not anticipated that the proposed repeal would adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state

or a sector of the state. The commission concludes that the proposed repeal does not meet the definition of a "Major environmental rule."

Furthermore, even if the proposed repeal did meet the definition of a major environmental rule, the proposed repeal would not be subject to Texas Government Code, §2001.0225, because it does not meet any of the four applicable requirements specified in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225(a) applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The proposed repeal of §315.1 would not cause any of the results listed in Texas Government Code, §2001.0225(a).

Under Texas Government Code, §2001.0225, only a major environmental rule requires a regulatory impact analysis. Because the proposed repeal would not constitute a major environmental rule, a regulatory impact analysis is not required.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this pre-amble.

Takings Impact Assessment

The commission evaluated the proposed repeal and performed an assessment of whether the proposed repeal constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of the proposed action is to repeal a rule that would be more appropriately consolidated into Chapter 305, Subchapter P. Chapter 314 contains adoption by reference of federal regulations, similar to Chapter 305, Subchapter P. Consolidation would improve the overall organization of TCEQ rules related to the TPDES program. The proposed repeal would substantially advance this stated purpose. Promulgation and enforcement of this proposed repeal would be neither a statutory nor a constitutional taking of private real property because the proposed repeal would not affect real property.

In particular, there are no burdens imposed on private real property, and the proposed repeal would eliminate an unnecessary rule that would be re-proposed and consolidated in Chapter 305, Subchapter P. Because the proposed repeal would not affect real property, it would not burden, restrict, or limit an owner's right to property or reduce its value by 25% or more beyond that which would otherwise exist in the absence of the proposed repeal. Therefore, this proposed repeal would not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed repeal in accordance with Coastal Coordination Act implementation rules, 31 TAC §505.22 and

found the proposed rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the proposed repeal includes protecting, preserving, restoring, and enhancing the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs); and ensuring sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone. CMP policies applicable to the proposed repeal includes policies for discharges of wastewater.

The proposed rulemaking is consistent with the above goals and policies by requiring wastewater discharges to comply with federal regulations established to protect water resources.

Promulgation and enforcement of the repeal would not violate or exceed any standards identified in the applicable CMP goals and policies because the proposed repeal would be consistent with these CMP goals and policies and the repeal would not create or have a direct or significant adverse effect on any CNRAs.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on November 9, 2021, at 10:00 a.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by November 8, 2021. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on November 8, 2021, to those who register for the hearing.

For the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YTRIMmM0YjEtMzcyNy00MjMyLTk0MGQtZDc0ODA1NDImMW-Zl%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%2230ec010b-ff0b-4618-bbc4-622a14f9cb18%22%2c%22Is-BroadcastMeeting%22%3a%22true%7d&btype=a&role=a

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Cecilia Mena, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be

submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2021-020-305-OW. The comment period closes on November 9, 2021. Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Ms. Laurie Fleet, Water Quality Division, at (512) 239-5445.

Statutory Authority

The repeal is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's general authority to carry out its jurisdiction; TWC, §5.103(a) and §5.105, which provide the commission with the authority to adopt rules and policies necessary to carry out its powers and duties under the TWC and other laws of the state; TWC, §5.120, which states the commission shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed repeal implements TWC, §§5.013, 5.102, 5.103(a), 5.105, 5.120, 26.011, and 26.027.

§315.1. General Pretreatment Regulations for Existing and New Sources of Pollution.

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103782

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 239-2809

CHAPTER 321. CONTROL OF CERTAIN ACTIVITIES BY RULE

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes to repeal §§321.71 - 321.81, 321.91 - 321.97, and 321.211 - 321.220.

Background and Summary of the Factual Basis for the Proposed Rules

This rulemaking is being proposed in response to a quadrennial rule reviews (Non-Rule Project Number 2019-033-321-OW) wherein the commission determined that Chapter 321, Subchapters E, F, and L were obsolete (December 13, 2019, issue of the *Texas Register* (44 TexReg 7719)).

Chapter 321, Subchapter E regulates wastewater discharges from surface coal mining, preparation, and reclamation activities; Subchapter F regulates wastewater discharges from the shrimp industry; and Subchapter L regulates wastewater discharges from motor vehicles cleaning facilities. These subchapters are obsolete because the Memorandum of Agreement (MOA) between TCEQ and the United States Environmental Protection Agency (EPA) concerning the National Pollutant Discharge Elimination System (NPDES) program prohibits TCEQ from issuing wastewater discharge authorizations under these subchapters. TCEQ authorizes these discharges under either an individual permit or general permit which comply with all necessary NPDES requirements.

Section by Section Discussion

Subchapter E: Surface Coal Mining, Preparation and Reclamation Activities

The commission proposes the repeal of §§321.71 - 321.81. The MOA between TCEQ and the EPA concerning the NPDES program prohibits TCEQ from issuing wastewater discharge authorizations under this subchapter. TCEQ authorizes discharges from surface coal mining, preparation and reclamation activities under an individual permit which comply with all necessary NPDES requirements.

Subchapter F: Shrimp Industry

The commission proposes the repeal of §§321.91 - 321.97. The MOA between TCEQ and the EPA concerning the NPDES program prohibits TCEQ from issuing wastewater discharge authorizations under this subchapter. TCEQ authorizes discharges from shrimp facilities under either an individual permit or general permit which comply with all necessary NPDES requirements.

Subchapter L: Discharges to Surface Waters from Motor Vehicles Cleaning Facilities

The commission proposes the repeal of §§321.211 - 321.220. The MOA between TCEQ and the EPA concerning the NPDES program prohibits TCEQ from issuing wastewater discharge authorizations under this subchapter. TCEQ authorizes discharges from motor vehicles cleaning facilities under an individual permit which comply with all necessary NPDES requirements.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, has determined that for the first five-year period the proposed rules would be in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed rulemaking.

Public Benefits and Costs

Ms. Bearse determined that for each year of the first five years the proposed repeals would be in effect the public benefit anticipated would be improved readability of the chapter and compliance with the MOU between the TCEQ and the EPA. The proposed rulemaking is not anticipated to result in fiscal implications for businesses or individuals.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking would not adversely affect a local economy in a material way for the first five years that the proposed rulemaking would be in effect.

Rural Community Impact Statement

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking would not adversely affect rural communities in a material way for the first five years that the proposed repeals would be in effect. The rulemaking would apply statewide and have the same effect in rural communities as in urban communities.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rulemaking for the first five-year period the proposed repeals would be in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed rulemaking would not adversely affect a small or micro-business in a material way for the first five years the proposed repeals would be in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking would not create or eliminate a government program and would not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking would not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking repeals obsolete rules relating to wastewater discharges. The proposed rulemaking would not increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed rulemaking should not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking actions would not be subject to that statute because the proposed repeals do not meet the criteria for "Major environmental rules" as defined in Texas Government Code, §2001.0225(g)(3). Texas Government Code, §2001.0225 applies only to rules that are specifically intended to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

The specific purpose of this proposed rulemaking is to repeal Chapter 321, Subchapters E, F, and L. Chapter 321, Subchapter E regulates discharges from surface coal mining, preparation, and reclamation activities; Subchapter F regulates discharges from the shrimp industry; and Subchapter L regulates discharges from motor vehicles cleaning facilities. The proposed rulemaking seeks to repeal these subchapters pursuant to the MOA between TCEQ and EPA concerning the NPDES program. The MOA prohibits TCEQ from issuing authorizations under these subchapters because they do not entail all NPDES requirements. TCEQ authorizes the discharges described in Subchapters E, F, and L under an individual permit which comply with all necessary NPDES requirements. The proposed rulemaking action will promote consistency between federal and state rules.

Furthermore, even if the proposed rulemaking did meet the definition of a "Major environmental rule," it would not be subject to Texas Government Code, §2001.0225 because it does not meet any of the four applicable requirements specified in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225(a) applies only to a state agency's adoption of a major environmental rule that: (1) exceeds a standard set by federal law, unless state law specifically requires the rule; (2) exceeds an express requirement of state law, unless federal law specifically requires the rule; (3) exceeds a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or (4) is adopted solely under the general powers of the agency instead of under a specific state law.

In this case, the proposed rulemaking would not meet any of these requirements. First, this rulemaking would not exceed a standard set by federal law, it promotes consistency with federal law and repeals rules that do exceed federal standards. Second, the proposed rulemaking would not exceed an express requirement of state law, but rather expands the scope of an existing state law. Third, the proposed rulemaking would not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program. Finally, the commission proposes the rulemaking action under Texas Water Code, §§5.013, 5.102, 5.105, 5.120, 26.011, and 26.027. Therefore, the commission does not propose this rulemaking action solely under the commission's general powers.

The commission invites public comment on the Draft Regulatory Impact Analysis Determination.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission has prepared a takings impact assessment for the proposed rulemaking action pursuant to Texas Government Code, §2007.043. The specific purpose of this proposed rulemaking is to repeal Chapter 321, Subchapters E, F, and L. Chapter 321, Subchapter E regulates discharges from surface coal mining, preparation, and reclamation activities; Subchapter F regulates discharges from the shrimp industry; and Subchapter L regulates discharges from motor vehicles cleaning facilities. These subchapters are obsolete because the MOA between TCEQ and EPA concerning the NPDES program prohibits TCEQ from issuing authorizations under these subchapters. TCEQ authorizes these discharges under an individual permit which comply with all necessary NPDES requirements.

The proposed rulemaking would not affect a landowner's rights in private real property because this proposed rulemaking would not burden, restrict, or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulations. The proposed rulemaking would not constitute a taking because it would not burden private real property.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found the proposal is a rulemaking identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) (Actions

and Rules Subject to the Coastal Management Program), and will, therefore, require that goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the rulemaking would not affect any coastal natural resource areas because discharges from the activities regulated by the sections proposed for repeal are being authorized under either an individual permit or general permit which comply with NPDES requirements. Repealing these subchapters removes the ability of these activities to be authorized under a registration.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on November 9, 2021, at 2:00 p.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by November 5, 2021. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on November 8, 2021, to those who register for the hearing.

Members of the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ND-ExOTI0ZDAtMGQ3NC00ZDlZLTkwMzUtMTcyYzkyNDc1ODAz%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%22b237360-1655-4724-96f6-ba9493e841ba%22%2c%22Is-BroadcastMeeting%22%3a%22true%22%7d

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Ms. Lee Bellware, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2021-022-321-OW. The comment period closes on November 9, 2021. Copies of the proposed rulemaking can be obtained from the commission's website

at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Ms. Laurie Fleet, Water Quality Division, (512) 239-5445.

SUBCHAPTER E. SURFACE COAL MINING, PREPARATION, AND RECLAMATION ACTIVITIES

30 TAC §§321.71 - 321.81

Statutory Authority

The rulemaking action is proposed under Texas Water Code (TWC), §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out the powers and duties under the TWC and other laws of the state; TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; TWC, §5.120, which requires the commission to administer the law so as to promote judicious use and maximum conservation and protection of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to establish the level of quality to be maintained in, and to control the quality of, the water in the state by subjecting waste discharges or impending waste discharges to reasonable rules or orders adopted or issued by the TCEQ in the public interest; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed rulemaking implements the Memorandum of Agreement between TCEQ and the United States Environmental Protection Agency concerning the National Pollutant Discharge Elimination System program, which prohibits TCEQ from issuing authorizations under this subchapter.

§321.71. *Introduction and Purpose.*

§321.72. *Definitions.*

§321.73. *Discharges Authorized by Rule.*

§321.74. *Permit Required.*

§321.75. *Term, Modifications.*

§321.76. *Hearing.*

§321.77. *Enforcement.*

§321.78. *Effluent Limitations.*

§321.79. *Additional Effluent Limitations.*

§321.80. *Associated Facilities.*

§321.81. *Monitoring and Reporting of Data.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 239-6095

SUBCHAPTER F. SHRIMP INDUSTRY

30 TAC §§321.91 - 321.97

Statutory Authority

The rulemaking action is proposed under Texas Water Code (TWC), §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out the powers and duties under the TWC and other laws of the state; TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; TWC, §5.120, which requires the commission to administer the law so as to promote judicious use and maximum conservation and protection of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to establish the level of quality to be maintained in, and to control the quality of, the water in the state by subjecting waste discharges or impending waste discharges to reasonable rules or orders adopted or issued by the TCEQ in the public interest; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed rulemaking implements the Memorandum of Agreement between TCEQ and the United States Environmental Protection Agency concerning the National Pollutant Discharge Elimination System program, which prohibits TCEQ from issuing authorizations under this subchapter.

§321.91. *Definitions.*

§321.92. *Applicability.*

§321.93. *Certificate of Registration.*

§321.94. *Domestic Waste Disposal.*

§321.95. *Requirements.*

§321.96. *Right of Review.*

§321.97. *Motion to Overturn.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-6095

SUBCHAPTER L. DISCHARGES TO SURFACE WATERS FROM MOTOR VEHICLES CLEANING FACILITIES

30 TAC §§321.211 - 321.220

Statutory Authority

The rulemaking action is proposed under Texas Water Code (TWC), §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out the powers and duties under the TWC and other laws of the state; TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; TWC, §5.120, which requires the commission to administer the law so as to promote judicious use and maximum conservation and protection of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to establish the level of quality to be maintained in, and to control the quality of, the water in the state by subjecting waste discharges or impending waste discharges to reasonable rules or orders adopted or issued by the TCEQ in the public interest; and TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state.

The proposed rulemaking implements the Memorandum of Agreement between TCEQ and the United States Environmental Protection Agency concerning the National Pollutant Discharge Elimination System program, which prohibits TCEQ from issuing authorizations under this subchapter.

§321.211. *Definitions.*

§321.212. *Purpose and Applicability.*

§321.213. *Certificate of Registration and Public Notice.*

§321.214. *Active Agency Permits.*

§321.215. *General Requirements for Discharge.*

§321.216. *Specific Requirements for Discharge.*

§321.217. *Sampling, Reporting, and Recordkeeping.*

§321.218. *Restrictions.*

§321.219. *Enforcement and Revocation.*

§321.220. *Annual Waste Treatment Fee.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

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Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

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For further information, please call: (512) 239-6095



CHAPTER 351. REGIONALIZATION

SUBCHAPTER D. LOWER RIO GRANDE VALLEY

30 TAC §§351.41 - 351.45

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes to repeal §§351.41 - 351.45.

Background and Summary of the Factual Basis for the Proposed Rules

This rulemaking is being proposed in response to a quadrennial rule review (Non-Rule Project Number 2019-029-351-OW) wherein the commission determined that Chapter 351, Subchapter D was obsolete (October 25, 2019, issue of the *Texas Register* (44 TexReg 6384)).

The rules in Chapter 351, Subchapter D are based on Texas Water Code, Chapter 26, Subchapter C, Regional and Area-Wide Systems, which encourages and promotes the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state and to prevent pollution and maintain and enhance the quality of the water in the state. Within any standard metropolitan statistical area in the state, the commission is authorized to implement this policy by defining areas of regional or area-wide systems and designating a system to serve the area defined. In relation with this authority, the rules designate the Rio Grande Valley Pollution Control Authority as a regional provider for the Lower Rio Grande Valley Regional Area. The commission proposes this rulemaking because the Rio Grande Valley Pollution Control Authority no longer exists nor are there any wastewater permits issued to any regional system in this regional area.

Section by Section Discussion

Subchapter D: Lower Rio Grande Valley

The commission proposes the repeal of §§351.41 - 351.45, which designate the Rio Grande Valley Pollution Control Authority as a regional provider for the Lower Rio Grande Valley Regional Area. This subchapter is obsolete because the Rio Grande Valley Pollution Control Authority no longer exists nor are there any wastewater permits issued to any regional system in this regional area. Regulated entities that propose to install and operate a wastewater treatment plant in this regional area are currently required to obtain an individual permit to discharge wastewater.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, has determined that for the first five-year period the proposed rules would be in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed rulemaking.

Public Benefits and Costs

Ms. Bearse determined that for each year of the first five years the proposed rules would be in effect the public benefit anticipated would be improved readability and transparency in the chapter because of the removal of obsolete provisions. The proposed rulemaking is not anticipated to result in fiscal implications for businesses or individuals.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking would not adversely affect a local economy in a material way for the first five years that the proposed rulemaking would be in effect.

Rural Community Impact Statement

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking would not adversely affect rural communities in a material way for the first five years that the proposed rules would be in effect. The rulemaking would apply statewide and have the same effect in rural communities as in urban communities.

Small Business and Micro-Business Assessment

No adverse fiscal implications are anticipated for small or micro-businesses due to the implementation or administration of the proposed rulemaking for the first five-year period the proposed rules would be in effect.

Small Business Regulatory Flexibility Analysis

The commission reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed rulemaking would not adversely affect a small or micro-business in a material way for the first five years the proposed rules would be in effect.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking would not create or eliminate a government program and will not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking would not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking would repeal obsolete rules relating to a regional provider that no longer exists. The proposed rulemaking would not increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed rulemaking would not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the proposed rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking action is not subject to that statute because the proposed rules do not meet the criteria for "Major environmental rules" as defined in Texas Government Code, §2001.0225(g)(3). Texas Government Code, §2001.0225, applies only to rules that are specifically intended to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

The specific purpose of this proposed rulemaking is to repeal Chapter 351, Subchapter D, which designates the Rio Grande Valley Pollution Control Authority as a regional wastewater service provider for the Lower Rio Grande Valley Regional Area. This subchapter is obsolete because the Rio Grande Valley Pollution Control Authority no longer exists nor are there any wastewater permits issued to any regional system in this regional area. Regulated entities that propose to install and operate a wastewater treatment plant in this regional area are currently required to obtain an individual permit to discharge wastewater.

Furthermore, even if the proposed rulemaking did meet the definition of a "Major environmental rule," it would not be subject to Texas Government Code, §2001.0225 because it does not meet any of the four applicable requirements specified in Texas

Government Code, §2001.0225(a). Texas Government Code, §201.0225(a) applies only to a state agency's adoption of a major environmental rule that: (1) exceeds a standard set by federal law, unless state law specifically requires the rule; (2) exceeds an express requirement of state law, unless federal law specifically requires the rule; (3) exceeds a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or (4) is adopted solely under the general powers of the agency instead of under a specific state law.

In this case, the proposed rulemaking does not meet any of these requirements. First, this rulemaking would not exceed a standard set by federal law it promotes consistency with federal law and repeals rules that do exceed federal standards. Second, the proposed rulemaking would not exceed an express requirement of state law, but rather expands the scope of an existing state law. Third, the proposed rulemaking would not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program. Finally, the commission proposes this rulemaking action under Texas Water Code, §§5.013, 5.102, 5.105, 5.120, 26.011, and 26.027. Therefore, the commission does not propose the rulemaking action solely under the commission's general powers.

The commission invites public comment on the Draft Regulatory Impact Analysis Determination.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission has prepared a takings impact assessment for the proposed rulemaking action pursuant to Texas Government Code, §2007.043. The specific purpose of this proposed rulemaking is to repeal Chapter 351, Subchapter D, which designates the Rio Grande Valley Pollution Control Authority as a regional wastewater service provider for the Lower Rio Grande Valley Regional Area. This subchapter is obsolete because the Rio Grande Valley Pollution Control Authority no longer exists nor are there any wastewater permits issued to any regional system in this regional area. Regulated entities that propose to install and operate a wastewater treatment plant in this regional area are currently required to obtain an individual permit to discharge wastewater.

The proposed rulemaking would not affect a landowner's rights in private real property because this proposed rulemaking would not burden, restrict, or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulations. The proposed rulemaking would not constitute a taking because it would not burden private real property.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found that the sections proposed for repeal are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor would the repeals affect any action or authorization identified in Coastal Coordination Act implementation rules, 31 TAC §505.11(a)(6). Therefore, the proposed rulemaking is not subject to the Texas Coastal Management Program.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on November 9, 2021, at 2:00 p.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by November 5, 2021. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on November 8, 2021, to those who register for the hearing.

Members of the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/join/19%3ameeting_ND-ExOTI0ZDAtMGQ3NC00ZDIzLTkwMzUtMTcyYzkyNDc1ODAz%40thread.v2/0?context=%7b%22id%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22oid%22%3a%22bf237360-1655-4724-96f6-ba9493e841ba%22%2c%22Is-BroadcastMeeting%22%3atrue%7d

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Ms. Lee Bellware, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2021-022-321-OW. The comment period closes on November 9, 2021. Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Ms. Laurie Fleet, Water Quality Division, (512) 239-5445.

Statutory Authority

The rulemaking action is proposed under Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; TWC, §5.120, which requires the commission to administer the law so as to promote judicious use and maximum conservation and protection of the environment and the natural resources of the state; TWC, §26.011, which provides the commission with the authority to establish the level of quality to be maintained in, and to control the quality of, the water in the state by subjecting waste discharges or impending waste discharges to reasonable rules or orders adopted or issued by the TCEQ in the public interest; TWC, §26.027, which authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state; and TWC, §26.081, which authorizes the commission to encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state and to prevent pollution and maintain and enhance the quality of the water in the state.

The proposed rulemaking implements TWC, §§5.103, 5.105, 5.013, and 26.081.

§351.41. *Definitions.*

§351.42. *Designation of Regional Area.*

§351.43. *Designation of Regional Entity.*

§351.44. *Additional Duties of Regional Entity.*

§351.45. *Assistance to Department.*

The agency certifies that legal counsel has reviewed the proposal and found it to be within the state agency's legal authority to adopt.

Filed with the Office of the Secretary of State on September 24, 2021.

TRD-202103787

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Earliest possible date of adoption: November 7, 2021

For further information, please call: (512) 239-6095



ADOPTED RULES

Adopted rules include new rules, amendments to existing rules, and repeals of existing rules. A rule adopted by a state agency takes effect 20 days after the date on which it is filed with the Secretary of State unless a later date is required by statute or specified in the rule (Government Code, §2001.036). If a rule is adopted without change to the text of the proposed rule, then the *Texas Register* does not republish the rule text here. If a rule is adopted with change to the text of the proposed rule, then the final rule text is included here. The final rule text will appear in the Texas Administrative Code on the effective date.

TITLE 4. AGRICULTURE

PART 2. TEXAS ANIMAL HEALTH COMMISSION

CHAPTER 40. CHRONIC WASTING DISEASE

4 TAC §§40.1 - 40.8

The Texas Animal Health Commission in a duly noticed meeting on September 21, 2021, adopted Chapter 40, titled "Chronic Wasting Disease", of Title 4, Texas Administrative Code. Sections 40.1 - 40.5, 40.7, and 40.8 are adopted without changes to the proposed text as published in the August 6, 2021, issue of the *Texas Register* (46 TexReg 4772) and will not be republished. Section 40.6 is adopted with changes to the proposed text as published in the same issue of the *Texas Register* and will be republished.

JUSTIFICATION FOR RULE ACTION

Chronic wasting disease is a degenerative and fatal neurological communicable disease recognized by the veterinary profession that affects susceptible cervid species. CWD can spread through natural movements of infected animals and transportation of live infected animals or carcass parts. Specifically, prions are shed from infected animals in saliva, urine, blood, soft-antler material, feces, or from animal decomposition, which ultimately contaminates the environment in which CWD susceptible species live. CWD has a long incubation period, so animals infected with CWD may not exhibit clinical signs of the disease for months or years after infection. The disease can be passed through contaminated environmental conditions, and may persist for a long period of time. Currently, no vaccine or treatment for CWD exists.

In May 2019, the USDA updated the CWD Program Standards ("federal standards"). The standards were revised to clarify and update acceptable methods for complying with the legal requirements in 9 CFR Parts 55 and 81. As a participating Approved State CWD Herd Certification Program, the commission is proposing to update the Herd Certification Program rules to align with revised federal standards where applicable and federal regulations.

The proposed amendments for Containment Zone 6 and Surveillance Zones 3, 6 and 7 are in response to CWD discoveries in Lubbock, Hunt, and Uvalde counties. On March 1, 2021, CWD was confirmed and reported in a free-ranging 8.5-year-old mule deer in Lubbock County. The proposed amendment creates Containment Zone 6 and Surveillance Zone 6 in response to that confirmed case. On March 31, 2021, CWD was reported in white-tailed deer in breeding facilities in Hunt and Uvalde counties. The proposed extension to Surveillance Zone 3 is in response to the confirmed CWD cases in Uvalde County, and

Surveillance Zone 7 is proposed in response to the confirmed CWD case in Hunt County. The purpose of the restriction zones is to both increase surveillance and reduce the risk of CWD being spread from areas where it may exist.

As such, the adoption of these rules will likely increase the commission's detection of CWD in areas of Texas where the disease is confirmed or likely to be detected and reduce the inadvertent movement of CWD from those areas. Further, the rules will be more consistent with the Code of Federal Regulations and the federal CWD Herd Certification Program Standards. Finally, the amendments adopted will improve the rules' readability to provide herd owners with clearer information to best mitigate the risk and spread of CWD in Texas.

HOW THE RULES WILL FUNCTION

The purpose of Chapter 40 is to prevent the introduction and spread of chronic wasting disease (CWD) in Texas by seeking to reduce the risk of interstate and intrastate transmission of CWD in susceptible cervid species. Throughout the chapter, amendments are adopted to clarify, correct, and update information regarding CWD management. Non-substantive grammatical and editorial changes are also adopted throughout the chapter for improved readability.

In §40.1, concerning Definitions, terms are alphabetized and added or amended for clarification throughout the rest of the chapter as well as to align with federal regulations and standards. Section 40.2, concerning General Requirements, makes editorial changes to clarify the rule. Section 40.3, concerning Herd Certification Program for Cervidae, amends the title to better describe the content of the section. Further, most amendments throughout the section are adopted to align with the federal Herd Certification Program Standards or 9 CFR Part 55; some amendments are specific to commission Herd Certification Program requirements. Section 40.4, concerning Entry Requirements, amends a cross-reference and reorganizes the section for improved readability. Section 40.5, concerning Surveillance and Movement Requirements for Exotic CWD Susceptible Species, amends definitions and makes non-substantive changes for consistency and accuracy. Section 40.6, concerning CWD Movement Restriction Zones, adopts one new containment zone, two new surveillance zones, and an expansion to an existing surveillance zone. Other amendments are adopted for clarification, improved readability, and consistency with the chapter. Section 40.7, concerning Executive Director Declaration of a CWD Movement Restriction Zone, amends terms for accuracy and consistency. Section 40.8, concerning Enforcement and Penalties, is adopted to describe the scope of applicable penalties pursuant to Chapter 161 of the Texas Agriculture Code.

SUMMARY OF COMMENTS RECEIVED AND COMMISSION RESPONSE

The 30-day comment period ended on September 5, 2021. The commission received one comment by an individual opposing the adoption of the proposal. Of the comment received and to the extent the commission could determine, a summary of that comment and the commission's response is provided below.

Comment: The commenter called for multiple changes to 4 TAC Chapter 40. First, the commenter stated that the CWD Herd Certification Program should be mandatory. Next, the commenter requested the United States declare a state of emergency on CWD to stop all international exports and ban interstate movement until live CWD testing is available. The commenter also called for an immediate and mandatory reporting requirement of captive or farmed cervid escapees, and if not found, cease all movement and shut down that farm's operations. Next, the commenter disagreed with providing federal indemnity. The commenter then suggested quarantining all animals and animal products confirmed to have CWD for 21 years. The commenter advocated for the inclusion of certain deer materials in 21 CFR 589.2001 similar to the federal rule's prohibition of certain bovine materials in food or feed to prevent the spread of BSE, and also requested an amendment making the transportation of the CWD prion a violation under the Lacey Act. The commenter requested all movement to and from a state with CWD be halted and the sale of straw bred bucks and all cervid products banned. The commenter also requested all captive and farmed cervids and cervid products be tested annually as well as before sales.

Response: Although the individual's comments are beyond the scope of the proposed amendments to Chapter 40, the commission will take the recommendations, where applicable, under advisement for future rulemaking. No changes are made as a result of this comment.

The commission received one written public comment from the Texas Chapter of The Wildlife Society ("Society") for consideration at the 410th Commission Meeting. To the extent the commission could determine, the Society did not indicate support or opposition to the proposed amendments. The summary of the comment and the commission's response is below.

Comment: The Texas Chapter of The Wildlife Society opposed movement of native and exotic CWD susceptible species until more is known about the extent, prevalence, and origins of CWD. The Society stated all movement of CWD susceptible species should stop until the TAHC has a high degree of certainty that CWD does not exist in those species. Specifically, the society is concerned that there is insufficient testing to confidently allow movement of CWD susceptible species, especially with regard to exotic susceptible species, and herd plan testing for deer on release sites. The Society called for monitoring release site fencing, and to restrict movement of CWD susceptible species from the breeding facilities to release sites until epidemiological work is completed and the prevalence of CWD is known. The Society also stated prudent actions should be taken to reduce costs associated with CWD management and to stop the spread of CWD.

Response: The commission agrees testing is important, and as such, the commission adopts a minimum mortality rate of 5% for white-tailed deer enrolled in the Herd Certification Program. The commission also agrees that the integrity of fencing is important. Release facilities are registered with and assigned an identification number by the Texas Parks and Wildlife Department. The comments regarding the release site herd plans are outside the

scope of the amended rules presented for adoption. The commission will take the comments regarding exotic CWD susceptible species testing under advisement for future rulemaking.

At the 410th Texas Animal Health Commission meeting on September 21, 2021, the commission received three public comments regarding 4 TAC Chapter 40. One organization, the Texas Wildlife Association, supported the rule adoption. Two individual commenters did not indicate support or opposition to the rule adoption. Summaries of the comments to the extent the commission could determine and the commission's response are below.

Comment: The Texas Wildlife Association (TWA) supported the rule. Specifically, the TWA stated support for antemortem testing and button tags, which are requirements proposed by the Texas Parks and Wildlife Department. The TWA also requested landowner notification for adjacent premises discovered to have confirmed CWD.

Response: The comments regarding antemortem testing and button tag are outside the scope of the amended rules presented for adoption. The request to notify adjacent landowners is beyond the scope of the current rule, but the commission will take the recommendation under advisement for future rulemaking.

Comment: The two individuals who commented on the rule did not indicate support or opposition to the adoption. The individuals discussed copper as a feed additive for cervids based on the potential that copper deficiency is related to chronic wasting disease susceptibility.

Response: The comments are outside the scope of the amended rule presented for adoption.

STATUTORY AUTHORITY

The Texas Animal Health Commission is vested by statute, §161.041(a), titled "Disease Control", to protect all livestock, exotic livestock, domestic fowl, and exotic fowl from disease. The commission is authorized, through §161.041(b), to act to eradicate or control any disease or agent of transmission for any disease that affects livestock, exotic livestock, domestic fowl, or exotic fowl.

Pursuant to §161.0415, titled "Disposal of Diseased or Exposed Livestock or Fowl", the commission may require by order the slaughter of livestock, domestic fowl, or exotic fowl exposed to or infected with certain diseases.

Pursuant to §161.0417, titled "Authorized Personnel for Disease Control", the commission must authorize a person, including a veterinarian, to engage in an activity that is part of a state or federal disease control or eradication program for animals.

Pursuant to §161.046, titled "Rules", the commission may adopt rules as necessary for the administration and enforcement of this chapter.

Pursuant to §161.048, titled "Inspection of Shipment of Animals or Animal Product", the commission may require testing, vaccination, or another epidemiologically sound procedure before or after animals are moved. An agent of the commission is entitled to stop and inspect a shipment of animals or animal products being transported in this state to determine if the shipment originated from a quarantined area or herd; or determine if the shipment presents a danger to the public health or livestock industry through insect infestation or through a communicable or non-communicable disease.

Pursuant to §161.049, titled "Dealer Records", the commission may require a livestock, exotic livestock, domestic fowl, or exotic fowl dealer to maintain records of all livestock, exotic livestock, domestic fowl, or exotic fowl bought and sold by the dealer. The commission may also inspect and copy the records of a livestock, exotic livestock, domestic fowl, or exotic fowl dealer that relate to the buying and selling of those animals. The commission by rule shall adopt the form and content of the records maintained by a dealer.

Pursuant to §161.054, titled "Regulation of Movement of Animals; Exception", the commission, by rule, may regulate the movement of animals. The commission may restrict the intrastate movement of animals even though the movement of the animals is unrestricted in interstate or international commerce. The commission may require testing, vaccination, or another epidemiologically sound procedure before or after animals are moved. The commission is authorized, through §161.054(b), to prohibit or regulate the movement of animals into a quarantined herd, premises, or area. The Executive Director of the commission is authorized, through §161.054(d), to modify a restriction on animal movement, and may consider economic hardship.

Pursuant to §161.0541, titled "Elk Disease Surveillance Program", the commission by rule may establish a disease surveillance program for elk. Such rules include the requirement for persons moving elk in interstate commerce to test the elk for chronic wasting disease. Additionally, provisions must include testing, identification, transportation, and inspection under the disease surveillance program.

Pursuant to §161.0545, titled "Movement of Animal Products", the commission may adopt rules that require the certification of persons who transport or dispose of inedible animal products, including carcasses, body parts, and waste material. The commission by rule may provide terms and conditions for the issuance, renewal, and revocation of a certification under this section.

Pursuant to §161.056(a), titled "Animal Identification Program", the commission, to provide for disease control and enhance the ability to trace disease-infected animals or animals that have been exposed to disease, may develop and implement an animal identification program that is no more stringent than a federal animal disease traceability or other federal animal identification program. Section 161.056(d) authorizes the commission to adopt rules to provide for an animal identification program more stringent than a federal program only for control of a specific animal disease or for animal emergency management.

Pursuant to §161.060, titled "Authority to Set and Collect Fees", the commission may charge a fee for an inspection made by the commission as provided by commission rule.

Pursuant to §161.061, titled "Establishment", if the commission determines that a disease listed in §161.041 of this code or an agent of transmission of one of those diseases exists in a place in this state or among livestock, exotic livestock, domestic animals, domestic fowl, or exotic fowl, or a place in this state or livestock, exotic livestock, domestic animals, domestic fowl, or exotic fowl are exposed to one of those diseases or any agent of transmission of one of those diseases, the commission shall establish a quarantine on the affected animals or on the affected place. The quarantine of an affected place may extend to any affected area, including a county, district, pasture, lot, ranch, farm, field, range, thoroughfare, building, stable, or stockyard pen. The commission may, through §161.061(c), establish a quarantine to pro-

hibit or regulate the movement of any article or animal the commission designates to be a carrier of a disease listed in Section 161.041 or a potential carrier of one of those diseases, if movement is not otherwise regulated or prohibited for an animal into an affected area, including a county district, pasture, lot, ranch, field, range, thoroughfare, building, stable, or stockyard pen.

Pursuant to §161.0615, titled "Statewide or Widespread Quarantine", the commission may quarantine livestock, exotic livestock, domestic fowl, or exotic fowl in all or any part of this state as a means of immediately restricting the movement of animals potentially infected with disease and shall clearly describe the territory included in a quarantine area.

Pursuant to §161.065, titled "Movement from Quarantined Area; Movement of Quarantined Animals", the commission may provide a written certificate or written permit authorizing the movement of animals from quarantined places. If the commission finds animals have been moved in violation of an established quarantine or in violation of any other livestock sanitary law, the commission shall quarantine the animals until they have been properly treated, vaccinated, tested, dipped, or disposed of in accordance with the rules of the commission.

Pursuant to §161.081, titled "Importation of Animals", the commission may regulate the movement of livestock, exotic livestock, domestic animals, domestic fowl, or exotic fowl into this state from another state, territory, or country. The commission by rule may provide the method for inspecting and testing animals before and after entry into this state, and for the issuance and form of health certificates and entry permits.

Pursuant to §161.101, titled "Duty to Report", a veterinarian, a veterinary diagnostic laboratory, or a person having care, custody, or control of an animal shall report the existence of the disease, if required by the commission, among livestock, exotic livestock, bison, domestic fowl, or exotic fowl to the commission within 24 hours after diagnosis of the disease.

Pursuant to §161.148, titled "Administrative Penalty", the commission may impose an administrative penalty on a person who violates Chapter 161 or a rule or order adopted under Chapter 161. The penalty for a violation may be in an amount not to exceed \$5,000, effective September 1, 2021.

§40.6. CWD Movement Restriction Zones.

(a) Definitions:

(1) Check Station--TPWD-established mandatory check stations in any CZ or SZ or any portion of a CZ or SZ for the purpose of collecting biological information on CWD susceptible species taken within a CZ or SZ.

(2) CWD Containment Zone (CZ)--A geographic area in this state which CWD has been detected or the commission has determined, using the best available science, a high risk of CWD exists or may exist.

(3) CWD Surveillance Zone (SZ)--A geographic area in the state which the commission, using the best available science, has determined or where there is a risk of CWD existing and surveillance is necessary.

(4) Exotic CWD Susceptible Species--A non-native cervid species, which includes North American elk or wapiti (*Cervus canadensis*), red deer (*Cervus elaphus*), Sika deer (*Cervus nippon*), moose (*Alces alces*), reindeer and caribou (*Rangifer tarandus*), and any associated subspecies and hybrids.

(5) Final processing--The cleaning and processing by more than quarters of CWD susceptible species for cooking or storage purposes.

(6) High fence premises--A premises enclosed on all sides by a fence adequate to prevent the ingress and egress of all exotic CWD susceptible species.

(7) Native CWD Susceptible Species--All mule deer, white-tailed deer, and other native species under the jurisdiction of the TPWD are excluded from this definition and application of this section.

(8) Processing facility--A stationary facility designed and constructed to store or process CWD susceptible species.

(9) TPWD--The Texas Parks and Wildlife Department.

(10) Unnatural Movement--Any artificially induced movement of a live CWD susceptible species or the carcass of a CWD susceptible species.

(b) Declaration of area restricted for CWD. CWD has been detected in susceptible species in different locations in Texas. This creates a high risk for CWD exposure or infection in CWD susceptible species in those geographic areas. In order to protect other areas of the state from the risk of exposure and spread of CWD, restricted areas, such as containment zones and surveillance zones, are created to protect against the spread of and exposure to CWD and have necessary surveillance to epidemiologically assess the risk. The high-risk areas are delineated as follows:

(1) Containment Zone Boundaries:

(A) Containment Zone 1. That portion of the state within the boundaries of a line beginning in Culberson County where U.S. Highway (U.S.) 62-180 enters from the State of New Mexico; thence southwest along U.S. 62-180 to Farm-to-Market Road (F.M.) 1111 in Hudspeth County; thence south on F.M. 1111 to I.H. 10 thence west along I.H. 10 to S.H. 20; thence northwest along S.H. 20 to F.M. 1088; thence south along F.M. 1088 to the Rio Grande River; thence northwest along the Rio Grande River to the Texas-New Mexico border.

(B) Containment Zone 2. That portion of the state within the boundaries of a line beginning where I.H. 40 enters from the State of New Mexico in Deaf Smith County; thence east along I.H. 40 to U.S. 385 in Oldham County; thence north along U.S. 385 to the Oklahoma state line.

(C) Containment Zone 3. That portion of the state lying within Bandera, Medina and Uvalde counties and depicted in the following figure and more specifically described by the following latitude-longitude coordinate pairs: -99.29398096800, 29.63444908360; -99.29332773120, 29.63427752770; -99.29197515170, 29.63446380410; 29.63439690090; -99.28980120500, 29.63446380410; -99.28762690610, 29.63440631430; -99.28546157340, 29.63391967310; 29.63422467720; -99.28331448540, 29.63391967310; -99.28119484540, 29.63349260780; -99.27911173640, 29.63228013080; 29.63294531180; -99.27707408560, 29.63149991510; -99.27316985040, 29.62960823290; 29.63060800860; -99.27131999510, 29.62960823290; -99.26954898230, 29.62850487190; -99.26786439810, 29.62600673210; 29.62730265490; -99.26627345800, 29.62600673210; -99.26478297540, 29.62462265680; -99.26339933220, 29.62315635870; -99.26212845190, 29.62161412050; -99.26097577450, 29.62000254920; -99.25994623180, 29.61832854980; -99.25904422740, 29.61659929130; -99.25852031490, 29.61543045890; -99.25566836700,

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Figure: 4 TAC §40.6(b)(1)(C) (No change.)

(D) Containment Zone 4. That portion of the state lying within the boundaries of a line beginning in Val Verde County at the International Bridge and proceeding northeast along Spur 239 to U.S. 90; thence north along U.S. 90 to the intersection of U.S. 277/377, thence north along U.S. 277/377 to the U.S. 277/377 bridge at Lake Amistad (29.496183°, -100.913355°), thence west along the southern shoreline of Lake Amistad to International Boundary at Lake Amistad dam, thence south along the Rio Grande River to the International Bridge on Spur 239.

(E) Containment Zone 6. That portion of the state within the boundaries of a line beginning in Lubbock County where County Road (C.R.) 3600 intersects with E. Division Street in Slaton; thence west along E. Division Street to S. New Mexico Street; thence northwest along S. New Mexico Street to Railroad Avenue; thence northwest along Railroad Avenue to Industrial Drive; thence northwest along Industrial Drive to U.S. Highway (U.S.) 84; thence northwest along U.S. 84 to State Highway (S.H.) Spur 331; thence northwest along S.H. 331 to S.H. Loop 289; thence north along S.H. Loop 289 to Farm to Market (F.M.) 40; thence east along F.M. 40 to C.R. 3650; thence south along C.R. 3650 to C.R. 6840; thence east along C.R. 6840 to C.R. 3700; thence south along C.R. 3700 to C.R. 3600; thence south along C.R. 3600 to E. Division Street.

(2) Surveillance Zone Boundaries:

(A) Surveillance Zone 1. That portion of the state within the boundaries of a line beginning where U.S. 285 enters from the State of New Mexico in Reeves County; thence southeast along U.S. 285 to R.M. 652; thence west along R.M. 652 to Rustler Springs Rd./FM 3541 in Culberson County; thence south along Rustler Springs Rd./F.M. 3541 to F.M. 2185; thence south along F.M. 2185 to Nevel Road; thence west along Nevel Road to County Road 501; thence south along County Road 501 to Weatherby Road; thence south along Weatherby Road to F.M. 2185; thence southwest along F.M. 2185 to S.H. 54; thence south on S.H. 54 to U.S. 90; thence south along U.S. 90 to the Culberson County line; thence southwest along the Culberson County line to the Rio Grande River in Hudspeth County; thence north along the Rio Grande River to F.M. 1088; thence northeast along F.M. 1088 to S.H. 20; thence southeast along S.H. 20 to I.H. 10; thence

southeast along I.H. 10 to F.M. 1111; thence north on F.M. 1111 to U.S. 62/180; thence east and north along U.S. 62/180 to the New Mexico state line in Culberson County.

(B) Surveillance Zone 2. That portion of the state within the boundaries of a line beginning at the New Mexico state line where U.S. 60 enters Texas; thence northeast along U.S. 60 to U.S. 87 in Randall County; thence north along U.S. 87 to I.H. 27; thence north along U.S. 87/I.H. 27 to U.S. 287 in Moore County; thence north along U.S. 287 to the Oklahoma state line.

(C) Surveillance Zone 3. That portion of the state not within the CZ described in paragraph (b)(1)(C) of this subsection lying within a line beginning the intersection of F.M 1250 and U.S. Highway 90 in Hondo in Medina County; thence west along U.S. Highway 90 to F.M. 1574 in Uvalde County; thence south along F.M. 1574 to F.M. 1023 (Garner Field Road); thence west along F.M. 1023 to County Road 373; thence south along County Road 373 to County Road 374; thence west along County Road 374 to F.M. 140; thence northwest along F.M. 140 to F.M. 117; thence north along F.M. 117 to U.S. Highway 83; thence southwest along U.S. Highway 83 to F.M. 1435; thence north along F.M. 1435 to U.S. Highway 90; thence west along U.S. Highway 90 to F.M. 2369; thence northwest along F.M. 2369 to F.M. 1403; thence north along F.M. 1403 to State Highway 55; thence northwest along S.H. 55 to Indian Creek Road; thence northeast along Indian Creek Road to Lower Frio Ranch Road; thence southeast along Lower Frio Ranch Road to Deep Creek; thence southeast along Deep Creek to the U.S. Highway 83; thence north along U.S. Highway 83 to State Highway 127 in Concan; thence southeast along State Highway 127 to the Sabinal River in Uvalde County; thence north along the Sabinal River to F.M. 187; thence north along F.M. 187 to F.M. 470 in Bandera County; thence east along F.M. 470 to Tarpley in Bandera County; thence south along F.M. 462 to 18th Street in Hondo; thence east along 18th Street to State Highway 173; Thence south along State Highway 173 to U.S. Highway 90; thence west along U.S. Highway 90 to Avenue E (F.M. 462); thence south along Avenue E (F.M. 462) to F.M. 1250; thence west along F.M 1250 to U.S. Highway 90.

(D) Surveillance Zone 4. That portion of the state lying within a line beginning in Val Verde County at the confluence of Sycamore Creek and the Rio Grande River (29.242341°, -100.793906°); thence northeast along Sycamore Creek to U.S. 277; thence northwest on U.S. 277 to Loop 79; thence north along Loop 79 to the Union Pacific Railroad; thence east along the Union Pacific Railroad to Liberty Drive (north entrance to Laughlin Air Force Base); thence north along Liberty Drive to U.S. 90; thence west along U.S. 90 to Loop 79; thence north along Loop 79 to the American Electric Power (AEP) Ft. Lancaster-to-Hamilton Road 138kV transmission line (29.415542°, -100.847993°); thence north along the AEP Ft. Lancaster-to-Hamilton Road 138kV transmission line to a point where the AEP Ft. Lancaster-to-Hamilton Road 138kV transmission line turns northwest (29.528552°, -100.871618°); thence northwest along the AEP Ft. Lancaster-to-Hamilton Road 138kV transmission line to the AEP Ft. Lancaster-to-Hamilton Road maintenance road (29.569259°, -100.984758°); thence along the AEP Ft. Lancaster-to-Hamilton Road maintenance road to Spur 406; thence northwest along Spur 406 to U.S. 90; thence south along U.S. 90 to Box Canyon Drive; thence west along Box Canyon Drive to Bluebonnet Drive; thence southwest along Bluebonnet Drive to Lake Drive; thence south along Lake Drive to Lake Amistad (29.513298°, -101.172454°), thence southeast along the International Boundary to the International Boundary at the Lake Amistad dam; thence southeast along the Rio Grande River to the confluence of Sycamore Creek (29.242341°, -100.793906°).

(E) Surveillance Zone 5. That portion of the state lying within the boundaries of a line beginning on U.S. 83 at the Kerr/Kimble

County line; thence north along U.S. 83 to I.H. 10; thence northwest along on I.H. 10 to F.M. 2169; thence east along F.M. 2169 to County Road (C.R.) 410; thence east along C.R. 410 to C.R. 412; thence south along C.R. 412 to C.R. 470; thence east along C.R. 470 to C.R. 420; thence south along C.R. 420 to F.M. 479; thence east along F.M. 479 to C.R. 443; thence south along C.R. 443 to U.S. 290; thence west along U.S. 290 to I.H. 10; thence southeast along I.H. 10 to the Kerr/Kimble County line; thence west along the Kerr/Kimble County line to U.S. 83.

(F) Surveillance Zone 6. That portion of the state within the boundaries of a line beginning at the intersection of State Highway (S.H.) 207 and Farm to Market (F.M.) 211 in Garza County; thence west along F.M. 211 to U.S. Highway (U.S.) 87 in Lynn County; thence north along U.S. 87 to F.M. 41 in Lubbock County; thence west along FM 41 to F.M. 179; thence north along F.M. 179 to F.M. 2641; thence east along F.M. 2641 to U.S. 62/82; thence east along U.S. 62/82 to S.H. 207 in Crosby County; thence south along S.H. 207 to F.M. 211 in Garza County.

(G) Surveillance Zone 7. That portion of the state lying within the boundaries of a line beginning at S.H. 205; thence southeast along S.H. 205 to U.S. 80; thence east along U.S. 80 to North 4th Street in Wills Point; thence north along North 4th Street to F.M. 751, then north along F.M. 751 to Lake Tawakoni; thence west and north along the Lake Tawakoni shoreline to the confluence of Caddo Creek; thence northwest along Caddo Creek to West Caddo Creek; thence northwest along West Caddo Creek to I.H. 30; thence southwest along I.H. 30 to F.M. 548 to S.H. 205.

(c) Containment Zone Requirements:

(1) Movement. No exotic CWD susceptible species may be transported outside the CZ unless from a herd with a Certified Status as established through §40.3(c)(6) (relating to Herd Certification Program for Cervidae) of this chapter.

(2) Released Animals. No exotic CWD susceptible species may be released within the CZ outside a high fence premises.

(3) Testing. All exotic CWD susceptible species, 16 months of age or older, that are hunter harvested shall be tested for CWD. No part of a carcass of a CWD susceptible species, either killed or found dead may be removed from the CZ unless a testable CWD sample from the carcass is collected and tested. The results shall be provided to the commission or the TPWD within 30 days of receiving the test results.

(4) Carcass Movement Restrictions. No part of a carcass of a CWD susceptible species, either killed or found dead, within the CZ may be removed from the CZ unless it is in accordance with the requirements of subsection (e) of this section.

(5) Escaped Animals. Any escaped exotic CWD susceptible species which originated or resided in a CZ shall be captured and returned to the high fence premises of origin.

(6) Herd Plans. Facilities and associated properties in the CZ that have been issued a herd plan shall operate in accordance with the herd plan requirements as determined by the commission.

(7) Identification. All exotic CWD susceptible species released in a CZ shall be identified with a visible official identification device, which may include an eartag that conforms to the USDA alphanumeric National Uniform Eartagging System or an animal identification number (AIN), which may include a RFID device. If a CWD susceptible species is released into a high fence premises, the animal shall retain the acceptable official identification.

(d) Surveillance Zone Requirements:

(1) Movement. Prior to the movement of an exotic CWD susceptible species outside an SZ or from one premises in the SZ to another premises within the SZ, the premises of origin shall have an epidemiological risk assessment conducted by the commission.

(2) Released Animals. No exotic CWD susceptible species may be released within the SZ outside a high fence premises.

(3) Testing. All exotic CWD susceptible species, 16 months of age or older, that are hunter harvested shall be tested for CWD. No part of a carcass of a CWD susceptible species, either killed or found dead may be removed from the SZ unless a testable CWD sample from the carcass is collected and tested. The results shall be provided to the commission or the TPWD within 30 days of receiving the test results.

(4) Carcass Movement Restrictions. No part of a carcass of a CWD susceptible species, either killed or found dead, within the SZ may be removed from the SZ unless it is in accordance with the requirements of subsection (e) of this section.

(5) Escaped Animals. Any escaped exotic CWD susceptible species which originated or resided in an SZ shall be captured and returned to the high fence premises of origin.

(6) Herd Plans. Facilities and associated properties in the SZ that have been issued a herd plan shall operate in accordance with the herd plan requirements as determined by the commission.

(7) Identification. All exotic CWD susceptible species released in an SZ shall be identified with a visible official identification device, which may include an eartag that conforms to the USDA alphanumeric National Uniform Eartagging System or an animal identification number (AIN), which may include a RFID device. If a CWD susceptible species is released into a high fence premises, the animal shall retain the acceptable official identification.

(e) Carcass Movement Restrictions:

(1) No person shall transport or cause the transport of any part of a CWD susceptible species from a property within a CZ or SZ unless:

(A) meat has been cut up and packaged (boned or filleted);

(B) a carcass has been reduced to quarters with no brain or spinal tissue present;

(C) a cleaned hide (skull and soft tissue must not be attached or present);

(D) a whole skull (or skull plate) with antlers attached, provided the skull plate has been completely cleaned of all soft tissue;

(E) finished taxidermy products;

(F) cleaned teeth; or

(G) tissue prepared and packaged for delivery to and use by a diagnostic or research laboratory with results accessible to the commission.

(2) A CWD susceptible species harvested in a CZ or SZ may be transported from the CZ or SZ, provided it is accompanied by a TPWD-issued check-station receipt, which is required during the operation of the mandatory TPWD check-stations in the CZ or SZ, and that receipt shall remain with the CWD susceptible species until it reaches the possessor's permanent residence, a processing facility for final processing, or another location as permitted by the commission on a VS Form 1-27.

(3) The skinned or unskinned head of a CWD susceptible species from a CZ or SZ may be transported to a taxidermist for taxidermy purposes, provided all brain material, soft tissue, spinal column, and any unused portions of the head are disposed of by the taxidermist in a landfill permitted by the Texas Commission on Environmental Quality.

(f) The Executive Director may authorize movement. If movement is necessary or desirable to promote the objectives of this chapter or to minimize the economic impact of the restricted CWD susceptible species without endangering those objectives or the health and safety of other CWD susceptible species within the state, the Executive Director may authorize movement in a manner that creates minimal risk to the other CWD susceptible species in the state.

(g) A commission representative shall annually review the movement restriction zones and recommend to the commission whether to modify or rescind the zones.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 24, 2021.

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Myra Sines

Chief of Staff

Texas Animal Health Commission

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For further information, please call: (512) 719-0718



TITLE 19. EDUCATION

PART 2. TEXAS EDUCATION AGENCY

CHAPTER 61. SCHOOL DISTRICTS

SUBCHAPTER CC. COMMISSIONER'S RULES CONCERNING SCHOOL FACILITIES

The Texas Education Agency (TEA) adopts the repeal of §61.1033, an amendment to §61.1036, and new §61.1040, concerning school facilities. The repeal of §61.1033 is adopted without changes to the proposed text as published in the April 9, 2021 issue of the *Texas Register* (46 TexReg 2300) and will not be republished. Section 61.1036 and §61.1040 are adopted with changes to the proposed text as published in the April 9, 2021 issue of the *Texas Register* (46 TexReg 2300) and will be republished. The adopted revisions remove an obsolete rule, provide an end date for the current school facilities standards rule, and create a new rule to implement the safety standards required by Senate Bill (SB) 11, 86th Texas Legislature, 2019.

REASONED JUSTIFICATION: Texas Education Code (TEC), §46.008, requires the commissioner to establish standards for the adequacy of school facilities. Section 61.1033, adopted effective September 1, 1998, establishes standards for school facilities constructed before January 1, 2004. Section 61.1036, adopted effective June 9, 2003, establishes standards for facilities constructed on or after January 1, 2004.

SB 11, 86th Texas Legislature, 2019, added TEC, §7.061, which requires the commissioner to adopt or amend rules as necessary to ensure that building standards for instructional facilities and other school district and open-enrollment charter school facilities continue to provide a secure and safe environment. SB 11 also added TEC, §37.108(a)(2) and (3), to require a school district to adopt and implement a multi-hazard emergency operations plan that provides for, among other things, measures to ensure that district communications technology and infrastructure are adequate to allow for communication during an emergency and that district employees, including substitute teachers, have classroom access to a telephone, including a cellular telephone or another electronic communication device, that allows for immediate contact with district emergency services or emergency services agencies, law enforcement agencies, health departments, and fire departments.

To implement SB 11, adopted new §61.1040 establishes updated school facilities standards and new safety and security standards and compliance measures for instructional facilities constructed on or after November 1, 2021. The standards reflect recommendations from a school facilities standards advisory committee convened by the Texas Association of School Administrators and from other stakeholders providing input and public comment on previously proposed rules published in the *Texas Register* on May 15, 2020, and subsequently withdrawn by the agency effective November 9, 2020.

The new safety and security standards identified in adopted new §61.1040(k)(1) and (3) apply to all school district instructional facilities and all open-enrollment charter school instructional facilities. Compliance measures established in new §61.1040(k)(2) apply to all capital improvement projects of a school district or an open-enrollment charter school as a mechanism to implement additional safety and security standards for instructional facilities. Except for the safety and security standards and compliance measures identified in adopted new §61.1040(k), the standards do not otherwise apply to open-enrollment charter schools.

Adopted new §61.1040 addresses definitions and facilities standards for capital improvement projects necessary to promote educational adequacy, including the requirement for school districts to have educational specifications and long-range facilities plans; construction code requirements; methods to demonstrate compliance with construction quality standards; square footage requirements for instructional space, common areas, and special spaces; methods to demonstrate aggregate space compliance with the standards; and safety and security standards and compliance measures.

Section 61.1036 is amended to provide an end date that corresponds with the start date of the new standards. In addition, §61.1033 is repealed as those standards are obsolete.

The following changes were made to the rules since published as proposed.

Section 61.1036, School Facilities Standards for Construction on or after January 1, 2004

The section title and subsection (b)(3) were modified to reflect that the standards in the rule are effective for construction before November 1, 2021.

Section 61.1040, School Facilities Standards for Construction on or after November 1, 2021

The section title and subsection (c)(1) and (2) were modified to reflect that the standards in the rule are effective for construction on or after November 1, 2021.

In response to public comment, a definition for "non-designated entry" was added to the definitions as new subsection (a)(20) and the subsequent paragraphs were renumbered to accommodate the addition.

In response to public comment, subsection (d)(1)(A)(iii) was modified to remove the requirement that the long-range facility plan include a history of maintenance requirements, fulfillments, and completed and proposed projects to the facility. The updated language requires that the plan include a history of only completed capital improvement projects.

In response to public comment, subsection (d)(1)(B) was modified to remove the phrase "the inclusion of" so that the requirement reflects that the process shall include input from teachers, students, parents, taxpayers, and other school district stakeholders.

In response to public comment, subsection (e)(5) was modified to remove proposed language related to historically underutilized businesses for redundancy with Texas Government Code, Chapter 2161, and the subsequent subparagraphs were relettered to accommodate the deletion.

In response to public comment, subsection (f)(1)(C)(ii)(I) and (II) were modified to clarify responsibility for compliance with construction quality standards and specify that certain information provided by a local authority having jurisdiction must be in writing.

In response to public comment, subsection (g)(1)(A)(i) was modified to substitute the word "shall" for the word "may" to indicate that the School Library Standards and Guidelines adopted under TEC, §33.021, must be considered.

In response to public comment, subsection (g)(1)(A)(ii)(IV) was modified to eliminate the requirement that a school district add 25 square feet for each student computer in excess of 12 in the library.

In response to public comment, proposed subsection (g)(3), relating to required considerations for instructional safety for special spaces, was removed.

In response to public comment, subsection (h)(1)(F)(i) was modified to correct cross references to subsection (h)(3).

In response to public comment, subsection (j)(2)(G) was modified to narrow the designation of who can perform a plan review to include only an architect or an engineer.

In response to public comment, subsection (k)(3)(A) was modified to remove the requirement for the primary entrance of an instructional facility to always be door 0 and instead require that door to be the first in an entire sequence to allow flexibility for existing numbering systems in school districts.

In response to public comment, subsection (k)(5) was modified to clarify that any school district review that could modify public disclosure is narrowly tailored and limited to information related to school district safety and security information.

SUMMARY OF COMMENTS AND AGENCY RESPONSES: The public comment period on the proposal began April 9, 2021, and ended May 10, 2021. Following is a summary of the public comments received and corresponding responses.

Comment: A school district employee commented that the requirement in §61.1040(d)(1)(A)(iii) to include history of all relevant projects for every building would take huge resources to put into a legible format and should begin with projects contracted from this point forward, not for projects performed prior to 2021.

Response: The agency agrees and has revised §61.1040(d)(1)(A)(iii) at adoption to read, "history of completed capital improvement projects at the facility."

Comment: A school district employee commented that the requirement to obtain input from certain types of people is an overstretch beyond the statute's intent. The commenter stated that enough community input already exists through steering committees of bond referendums, the passing of measures on a ballot specific, and the fact that board members have approved the sales of bonds and project awards. The commenter further stated that many districts complete their long-range plans by spring of the year preceding projects and that if the input as stated in the proposal is required to be included as a component of each plan, it should be applicable for long range plans adopted after June 15, 2021, so people can plan accordingly for the upcoming years.

Response: The agency disagrees and provides the following clarification. The language in §61.1040(d)(1)(B) states that the school district shall consider input but does not necessitate its inclusion. The provisions in new §61.1040 become effective and should be followed beginning with the effective date of the rule. In response to other comments, the phrase "the inclusion of" was removed from §61.1040(d)(1)(B) at adoption.

Comment: The Texas Society of Architects (TxA) and a school district employee commented that the language in the rule that requires numbering systems for doors to begin with the number zero could be expensive and time consuming for districts to comply with. The district employee stated that many districts have existing numbering systems on doors, including physical numbers on the doors as well as digital numbering in door access systems that begin with a different number. The district employee stated that to make every primary entrance begin with zero would require renumbering every door, both physically and digitally. The district employee proposed that if numbering systems are already in place, even if the primary entrance is not zero, that districts be allowed to use their existing numbering system and continue that system on new construction as well. TxA had similar concerns and suggested that districts that had proactively added door numbering for exterior doors be allowed to continue to use their systems without penalty of having to change to comply with the rule.

Response: The agency agrees in part and disagrees in part. The agency has revised §61.1040(k)(3)(A) at adoption to read, "The primary entrance of an instructional facility, as defined by subsection (a)(23)(A) of this section, shall always be the first in the entire sequence and is the only door location that does not require numbering." However, the requirement that the numbering system begin at the front entrance and go clockwise remains.

Comment: The Texas Classroom Teachers Association (TCTA) commented that there are no requirements or guidelines in proposed new §61.1040 regarding how much adjustment can be made to the maximum instructional capacity under the qualitative method of compliance. TCTA commented that the "trigger" for pursuing this method of compliance is "prior documented approval of one or more instructional or operational practices for the proposed project that distributes or manages student capacity in

an innovative or non-traditional manner." TCTA stated this was a deeply concerning potential loophole for complying with the instructional facilities space standards set out in the proposed new rule. Accordingly, TCTA strongly recommended that rather than providing a wholesale alternative method of compliance as an option for accommodating instructional or operational practices that manage student capacity in an innovation/non-traditional manner, the agency provide a narrowly tailored exception process for districts to pursue with the agency when certifying compliance with instructional facilities space standards.

Response: The agency disagrees that an exception process is necessary to ensure compliance. The qualitative method simply allows two core spaces to be used if a school board has adopted a policy that modifies the proposed project's or campus's utilization. It allows additional spaces in the building to be counted as partially instructional in nature if they are partially used for instructional purposes.

Comment: TCTA commented with concerns about the change in proposed §61.1040(h)(3) and (i)(1) from delineating instructional space standards by type of instructional space, including general classrooms, specialized classrooms, etc., to "minimum square footage per student by campus type and the selected flexibility level." TCTA recommended that the rule set standards for types of instructional spaces, including general and specialized classrooms, rather than setting those standards at the school level.

Response: The agency disagrees that a change is needed to §61.1040. The facility standards simply allow a campus to design for a wider variety of class sizes and configurations that are permitted under the rule. The square footage per student provides that the building can meet the instructional needs of the capacity of the building and project.

Comment: TCTA commented with concerns about the provision in proposed new §61.1040(g)(3) for waiver ability from space standards for potentially high-risk environments like combination science classrooms/laboratories and science laboratories. TCTA recommended eliminating the ability for districts to seek waivers from these important safety standards.

Response: The agency agrees and has removed the waiver provision from the rule at adoption. TEA does not currently grant class-size waivers at the high-school level. It is a district's responsibility to ensure that safety standards are met and that class size does not exceed the number for which the space was designed.

Comment: TCTA commented that §61.1040(g)(1)(A)(i) should read, "A school district shall consider the School Library Standards and Guidelines as adopted under TEC, §33.021, when developing, implementing, or expanding library services" instead of "may consider."

Response: The agency agrees and has revised §61.1040(g)(1)(A)(i) at adoption to read "shall" instead of "may" to indicate that the standards must be considered.

Comment: TCTA commented in support of the minimum standards for combination science classrooms/laboratories for Kindergarten-Grade 8 in §61.1040(g)(2)(A)(i) and (ii). TCTA commented that the new standards improve upon current standards by requiring increased square feet per student as well as setting a maximum number of students.

Response: The agency agrees.

Comment: TCTA commented in support of the minimum standards for combination science classrooms/laboratories for Grades 9-12 in §61.1040(g)(2)(A)(iii). TCTA commented that the new standards improve upon current standards by setting square footage per student standards as well as a maximum number of students.

Response: The agency agrees.

Comment: TCTA commented in support of the minimum standards for science laboratories in Grades 6-8 in §61.1040(g)(2)(B)(ii). TCTA commented that the new standards improve upon current standards by requiring increased square feet per students as well as setting a maximum number of students.

Response: The agency agrees.

Comment: TCTA commented in support of the minimum standards for science laboratories in Grades 9-12 in §61.1040(g)(2)(B)(iii). TCTA commented that the new standards improve upon current standards by setting square footage per student standards as well as a maximum number of students.

Response: The agency agrees.

Comment: TCTA commented regarding §61.1040(b)(1)(E), which allows minor scopes of work to be performed as part of a major renovation without the minor scopes of work triggering compliance with the new standards. TCTA objected to the language based on the potential for a major loophole for districts to not have to comply with the instructional facilities space standards provided in rule and recommended that the provision be eliminated.

Response: The agency disagrees that the provision should be eliminated. The provision allows for minor scopes of work, like painting or flooring, that are not major renovations on their own to be included with major renovation projects. This will allow districts to get better pricing without requiring those areas to meet minimum space standards or methods of compliance.

Comment: TCTA commented that §61.1040(d)(1)(B) was weaker than the current school facilities rule because it only requires the long-range facility plan process to "consider the inclusion of input" rather than requiring the allowance of input in developing the educational specifications. TCTA recommended that the language be revised to strike the phrase "the inclusion of" so that it reads, "The process of developing the long-range facility plan shall consider input from teachers, students, parents, taxpayers, and other school district stakeholders."

Response: The agency agrees and has struck the phrase "the inclusion of" from §61.1040(d)(1)(B) at adoption. This change has no effect on the meaning of the rule language.

Comment: TCTA commented in support of §61.1040(j)(3)(C) that includes the provision that "a school district shall consider as part of a capital improvement project the use of designs, methods, and materials that will reduce the potential for indoor air quality problems." TCTA stated that the language improves upon current facilities standards.

Response: The agency agrees.

Comment: TCTA commented in support of §61.1040(j)(3)(D) that includes the provision that "a school district shall consider as part of a capital improvement project the use of sustainable school designs." TCTA stated that the language improves upon current facilities standards.

Response: The agency agrees.

Comment: TCTA commented on the provision of exceptions to additional safety and security standards based on cost in §61.1040(k)(4)(B). TCTA commented that allowing a building to go for five years without meeting any additional safety/security standards was not reasonable and recommended that the rule provide that the five-year long-range facility plan clearly state that if ceasing operation does not occur by the end of the third year, the facility will be compliant with at least two additional safety and security standards by the end of the following year.

Response: The agency disagrees with making the commenter's suggested change. TEA does not anticipate this exception being used frequently. However, in the event a district needed to take advantage of this exception, it is unlikely that the district would be able to put the additional safety and security standards in place in the shortened timeframe.

Comment: Three architects from PBK Architects, Inc. commented that proposed new §61.1040 has confusing square footage calculations. The commenters stated that the most significant change from previous facilities standards is the move to qualitative and quantitative methods of compliance, four levels of flexibility, and several square-foot-per-student calculation factors that must be assessed to determine a school's capacity. The commenters stated that the whole process seems much more confusing and convoluted. One commenter felt that the square footage calculations in proposed new §61.1040 are confusing and overly complicated and that the multiple levels of flexibility and square footage types will create various interpretations and misunderstandings during required board approvals as well as future analysis of building capacities. The commenters believe that the requirements of §61.1040(h), relating to the quantitative method of compliance for instructional facility space requirements, should be revisited and simplified.

Response: The agency disagrees. The complexity is necessary because the overall structure of the standards has changed. This allows for future modifications to be added based on research or other trusted sources. In addition, the higher levels of flexibility mean mobile furniture and technology, which likely necessitate additional square footage to account for multiple configurations and technology that would no longer be mounted to the wall like in a more traditional setting. The process involves applying a formula to calculate and show campus compliance. Specific suggestions to reduce the complexity of the calculation can be considered for future iterations of the standards.

Comment: Two architects from PBK Architects, Inc. commented that proposed new §61.1040 was too long. The commenters stated that the rule went from 11 pages in 2004 to 27 pages for the current proposal. Both commenters felt most of the growth is due to complexity with no apparent benefit.

Response: The agency disagrees. The new standards must take into account laws that have been enacted since the last update, and this necessitates the length of new §61.1040.

Comment: Three architects from PBK Architects, Inc. commented on minimum codes listed in §61.1040 and asked why the language needed to change. One commenter stated that having districts select their own code would mean the codes were more up to date than those listed in the rule that might not change for years. Another commenter stated that there did not seem to be a benefit to the added language. The third commenter stated that including specific codes date the document, requiring constant updates.

Response: The agency disagrees. The language required updating, and the codes listed in §61.1040(j) are for situations when a district would look to state-adopted codes. The codes will be updated in rule as needed.

Comment: Two architects from PBK Architects, Inc. commented on inclusive design. One commenter felt that the issue was a curriculum issue and not a facilities issue. Another commenter stated that school districts are obligated by new §61.1040 to set inclusive design goals and write a statement about addressing inclusive design in new and renovated facilities, but there are no standards proposed to determine if the goals are acceptable within the context of the new rule.

Response: The agency disagrees that any change is needed. Inclusive design is the intentional design for the variety of users of public school facilities, not related to curriculum. The purpose of this definition and inclusion in the education specifications is to require intentional decisions be made about facility design to meet the varied needs of users of the facility. Each campus and community are different so the goals and design decisions should be local and specific to the project and campus type.

Comment: Two architects from PBK Architects, Inc. commented on the necessity of board approvals. Both commenters stated that proposed new §61.1040 recommends board approvals for the TEA Square Footage Compliance path for every project. The commenters each felt that the number of actions seemed excessive and gave the opinion that it could be handled in other ways.

Response: The agency disagrees that the language needs to change. New §61.1040 does not necessitate that every project being pursued by a district be taken up separately by the board. If a district wants to designate all projects in a bond program as quantitative, it can do that and then take up a re-designation of a project to qualitative if it wants.

Comment: Two architects from PBK Architects, Inc. commented that the change from the existing standards regarding square footage per special education student will cause equity issues between new and existing campuses for a minor benefit and should be left alone.

Response: The agency disagrees. Additional square footage is needed for special education students. Existing facilities should be upgraded as projects are pursued.

Comment: Two architects from PBK Architects, Inc. commented on the inclusion of historically underutilized business (HUB) standards in §61.1040 and stated that the facilities rule was not the place for them.

Response: The agency agrees. The section on HUBs was stricken from §61.1040(e)(5)(C) at adoption.

Comment: Two architects from PBK Architects, Inc. commented that there was overlap in proposed new §61.1040 and the Texas Board of Architectural Examiners (TBAE) authority. The commenters stated that this standard specifies when an architect or engineer should be hired and said that authority was already with the TBAE. The commenters stated the language in the proposed new rule is at best duplicative and at worst confusing and should be removed.

Response: The agency disagrees that the language should be removed. Proposed new §61.1040(e)(4) addresses provisions if an architect is required to be hired. If it is required in the Texas Occupations Code and the project value exceeds \$50,000 due to public procurement processes, the provisions are triggered.

Comment: An architect from PBK Architects, Inc. commented that the square footage for libraries seems a bit outdated.

Response: The agency disagrees with making changes at this time. However, it may be reevaluated in a future review process.

Comment: An architect from PBK Architects, Inc. commented that more study was essential to determine the most straightforward way to achieve the goal of flexibility in school design. The commenter stated that the move toward a more innovative approach than simply counting square footage was admirable and necessary, but this method may not be the best.

Response: The agency disagrees that changes are needed to §61.1040 at this time. Because all of the spaces listed, with the exception of collaboration spaces, are currently used to establish building capacity, it seems logical to allow them to be used to show the facility has adequate instructional space to serve the number of students enrolled in the campus.

Comment: An architect from PBK Architects, Inc. commented that most of the safety and security requirements in §61.1040 were good starting points. The commenter stated that sophisticated districts execute these safety and security requirements already, and this standardizes a baseline of measures to implement on every significant project.

Response: The agency agrees.

Comment: An architect from PBK Architects, Inc. commented that changing the requirement for science countertops to six square foot per student instead of six linear feet make more sense.

Response: The agency agrees.

Comment: An architect from PBK Architects, Inc. commented that the methodology on how square footage is calculated is a bit confusing and has moved away from the previously simplistic qualitative method. The commenter noted that the requirement for a school district board of trustees to determine the district's compliance path before design development for every project leaves space to edit or modify to meet target budget numbers.

Response: The agency disagrees that the methodology leaves room for the board to edit or modify square footage calculations to meet target budget numbers. Edits and modifications would have to be of capacity and enrollment; otherwise, the board's designation either takes into account innovative policies or not.

Comment: An architect from PBK Architects, Inc. commented that the new standards appear to require less square footage overall per student. The commenter stated concern about the reduction of square footage for an overall campus after a year of social distancing and concern on occupancy.

Response: The agency disagrees that new §61.1040 reduces the required square footage. Square footage is summed up to a campus minimum. Social distancing is a short-term operational choice. If districts want to design for future or sustained social distancing, the rule does not preclude that.

Comment: An architect from PBK Architects, Inc. recommended an addition or requirement for outdoor learning environments. The commenter stated that with the myriad of statistics that show the value for students of all ages to spend time outside, Texas should embrace that in the new educational standards. The commenter further stated that outdoors is a continuation of the indoor learning environment.

Response: The comment is outside the scope of the proposed rulemaking. However, the commenter's suggestion can be considered in future rulemaking.

Comment: An architect from PBK Architects, Inc. commented that under proposed new §61.1040, new schools have the potential to be much smaller than pre-existing schools yet are deemed adequate for the same student capacity. The commenter stated that this accounting will likely be at odds with school administrators who feel the existing calculations leave their buildings too small already.

Response: The agency disagrees that a change is needed. The new standards simply change the compliance to the campus level instead of the space level.

Comment: TxA commented that the provisions in §61.1040(k) that direct school districts and open-enrollment charter schools to incrementally implement the specified safety and security standards in the rule based on the "project construction budget" definition in §61.1040(a)(25) will appropriately guide school districts and open-enrollment charter schools to make the foundational facilities upgrades specified to ensure effective implementation of Senate Bill 11 requirements. TxA suggested clarifying that the proposed "project construction budget" definition set out in subsection (a)(25) is to be based only on projected total aggregate dollars (as opposed to final total dollars) to establish subsection (k) compliance thresholds. TxA stated that would ensure the correct timing signals for the school district to approve the safety and security measures that are to be specified for the development of construction documents during the design phase of a capital improvement project.

Response: The agency disagrees that the requested clarification is necessary at this time. It may be reviewed at a future date.

Comment: TxA commented that proposed §61.1040(k)(1)(B) establishes a requirement that a document be developed by each school district or charter school designating each exterior door of each instructional facility on a campus as either a primary, secondary, or non-designated entrance and further requires that such designation of entrances be documented and become part of a school district long-range facility plan. TxA further commented that while primary and secondary entrances are defined in §61.1040(a)(23) and (29), respectively, there is currently no explicit or separate definition of a "non-designated entrance." TxA suggested that to avoid the potential for any confusion about the application of provisions relating to the various types of exterior doors defined in the rule a separate definition for a "non-designated entry" be added to subsection (a) to separate exterior doors that allow for emergency egress but do not operate as an entrance from the exterior of the building. TxA also suggested additional conforming changes be made to the proposed definition of a secondary entrance. To ensure all relevant definitions are closely aligned in the policy provisions of the rule, TxA also recommended changes to subsection (k) to conform the proposed definition of a "non-designated entry" with the access control specifications in subsection (k)(1)(B).

Response: The agency agrees. Section 61.1040(a) was modified at adoption to add a definition for "non-designated entry" in new subsection (a)(20). The definition reads, "Non-designated entry--A door that is not operable from the exterior and is designed to only allow for emergency egress."

Comment: TxA commented that clarification was needed for contractor certifications. TxA is concerned that the wording related to contractor certifications required in §61.1040(f)(1)(C)

could inadvertently be interpreted as requiring a contractor to certify that the facility meets building code requirements. TxA stated that the contractor does not and may not serve as the building code official, nor are they qualified to specify or certify applicable building code standards. To address any potential impact regarding insurability for design professionals or the appropriate contract accountability for contractors, TxA suggested changes be made to the contractor certification provisions in subsection (f)(1)(C)(ii)(I) to clarify, as expressed elsewhere in proposed §61.1040, that the contractor is required to build in accordance with the contract documents and to certify compliance with specified requirements and performance standards reflected in the construction documents.

Response: The agency agrees. At adoption, §61.1040(f)(1)(C)(ii)(I) was modified to clarify certification of contractual obligations of a contractor in accordance with the contract documents.

Additionally, §61.1040(f)(1)(C)(ii)(II) was modified at adoption to specify that documentation that a certificate of occupancy is not required or provided for by a local government must be in writing.

Comment: TxA commented that §61.1040(h)(1)(F)(i) should be updated to correct cross references to subsection (h)(3).

Response: The agency agrees and has modified the language at adoption to correct the cross references.

Comment: TxA commented that §61.1040(k)(5) should be amended to clarify that any school district review that could modify public disclosure is narrowly tailored and limited to information related to school district "safety and security" information.

Response: The agency agrees and has modified §61.1040(k)(5) at adoption to refine and more narrowly tailor the process by which a school district could limit public disclosure of information when related to "safety and security" information.

Comment: TxA commented that §61.1040(h)(1)(F)(i) and (i)(1)(F)(i), referencing the "maximum number of students that shall be served," may require clarification to address how that term is defined and whether it is intended to be defined as the "maximum occupant load per code" or by some other measure.

Response: The agency disagrees that the suggested change is necessary at this time. It may need to be reviewed at a future date.

Comment: TxA commented that §61.1040(j)(2)(G) may require clarification to ensure appropriate qualifications for those allowed to perform building code reviews as a third-party code compliance officer.

Response: The agency agrees and has modified the language at adoption to narrow the designation of who can perform a plan review to include only an architect or an engineer.

Comment: A school district employee commented that the requirement to add 25 square feet for computers in the library in excess of 12 is archaic and unnecessary. The commenter stated that with the prevalence of digital resources there should actually be less stack space and more computer stations. Additionally, the commenter stated that the minimum square footage requirements are excessive when a 3,500-student high school requires a 10,500 square foot library that will sit empty most of the day.

Response: The agency agrees and has modified §61.1040(g)(1)(A)(ii)(IV) at adoption to remove the reference to additional space for student computers.

19 TAC §61.1033

STATUTORY AUTHORITY. The repeal is adopted under Texas Education Code (TEC), §7.061, as added by Senate Bill 11, 86th Texas Legislature, 2019, which requires the commissioner of education to adopt or amend rules as necessary to ensure that building standards for instructional facilities provide a secure and safe environment; TEC, §46.001, which provides a definition for instructional facility; TEC, §46.002, which allows the commissioner to adopt rules for administering instructional facility programs; and TEC, §46.008, which requires the commissioner to establish standards for adequacy of school facilities.

CROSS REFERENCE TO STATUTE. The repeal implements Texas Education Code, §§7.061, 46.001, 46.002, and 46.008.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 22, 2021.

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Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

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Proposal publication date: April 9, 2021

For further information, please call: (512) 475-1497



19 TAC §61.1036, §61.1040

STATUTORY AUTHORITY. The amendment and new section are adopted under Texas Education Code (TEC), §7.061, as added by Senate Bill 11, 86th Texas Legislature, 2019, which requires the commissioner of education to adopt or amend rules as necessary to ensure that building standards for instructional facilities provide a secure and safe environment; TEC, §46.001, which provides a definition for instructional facility; TEC, §46.002, which allows the commissioner to adopt rules for administering instructional facility programs; and TEC, §46.008, which requires the commissioner to establish standards for adequacy of school facilities.

CROSS REFERENCE TO STATUTE. The amendment and new section implement Texas Education Code, §§7.061, 46.001, 46.002, and 46.008.

§61.1036. *School Facilities Standards for Construction before November 1, 2021.*

(a) Definitions and procedures. The following words, terms, and procedures, when used in this section, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Architect--An individual registered as an architect under the Texas Occupations Code, Chapter 1051, and responsible for compliance with the architectural design requirements and all other applicable requirements of the Texas Occupations Code, Chapter 1051.

(2) Educational program--A written document, developed and provided by the district, that includes the following information:

(A) a summary of the school district's educational philosophy, mission, and goals; and

(B) a description of the general nature of the district's instructional program in accordance with §74.1 of this title (relating to Essential Knowledge and Skills). The written educational program should describe:

(i) the learning activities to be housed, by instructional space;

(ii) how the subject matter will be taught (methods of instructional delivery);

(iii) the materials and equipment to be used and stored;

(iv) utilities and infrastructure needs; and

(v) the characteristics of furniture needed to support instruction.

(3) Educational specifications--A written document for a proposed new school facility or major space renovation that includes a description of the proposed project, expressing the range of issues and alternatives. School districts that do not have personnel on staff with experience in developing educational specifications shall use the services of a design professional or consultant experienced in school planning and design to assist in the development of the educational specifications. The school district shall allow for input from teachers, other school campus staff, and district program staff in developing the educational specifications. The following information should be included in the educational specifications:

(A) the instructional programs, grade configuration, and type of facility;

(B) the spatial relationships--the desired relationships for the functions housed at the facility:

(i) should be developed by the school district to support the district's instructional program;

(ii) should identify functions that should be:

(I) adjacent to, immediately accessible;

(II) nearby, easily accessible; and

(III) removed from or away from; and

(iii) should relate to classroom/instructional functions, instructional support functions, building circulation, site activities/functions, and site circulation;

(C) number of students;

(D) a list of any specialized classrooms or major support areas, noninstructional support areas, outdoor learning areas, outdoor science discovery centers, living science centers, or external activity spaces;

(E) a schedule of the estimated number and approximate size of all instructional and instructional support spaces included in the facility;

(F) estimated budget for the facility project;

(G) school administrative organization;

(H) provisions for outdoor instruction;

(I) hours of operation that include the instructional day, extracurricular activities, and any public access or use;

(J) the safety of students and staff in instructional programs, such as science and vocational instruction; and

(K) the overall security of the facility.

(4) Engineer--An individual registered as an engineer under the Texas Occupations Code, Chapter 1001, and responsible for compliance with the engineering design requirements and all other applicable requirements of the Texas Occupations Code, Chapter 1001.

(5) Grade levels:

(A) elementary school level--a school facility that includes some or all grades from prekindergarten through Grade 5 or Grade 6;

(B) middle school level--a school facility that includes some or all grades from Grade 6 through Grade 8 or Grade 9, or a school facility that includes only Grade 6;

(C) high school level--a school facility that includes some or all grades from Grade 9 or Grade 10 through Grade 12, or a school facility that includes only Grade 9; and

(D) secondary school level--a school facility that includes some or all grades from Grade 6 through Grade 12.

(6) Hazardous chemical--As defined by the Texas Health and Safety Code, Chapter 502, Hazard Communication Act.

(7) Instructional space--General classrooms, specialized classrooms, outdoor learning areas, and major support areas.

(8) Library--Library will include the following minimum requirements:

(A) reading/instructional area;

(B) reference/independent study area;

(C) stack area;

(D) circulation desk/area;

(E) computer/online reference areas; and

(F) necessary ancillary areas, such as offices, workrooms, head-end room, and storage rooms.

(9) Long-range school facility plan--School districts are encouraged to formulate a long-range facilities plan prior to making major capital investments. When formulating a plan, a school district's process should allow for input from teachers, students, parents, taxpayers, and other interested parties that reside within the school district. Major considerations should include:

(A) a description of the current and future instructional program and instructional delivery issues;

(B) the age, condition, and educational appropriateness of all buildings on the campus (in district), considering condition of all components and systems as well as design flexibility, including an estimate of cost to replace or refurbish and appropriate recommendations;

(C) verification of the suitability of school site(s) for the intended use, considering size, shape, useable land, suitability for the planned improvements, and adequate vehicular and pedestrian access, queuing, parking, playgrounds and fields, etc.; and

(D) a timeline and a series of recommendations to modify or supplement existing facilities to support the district's instructional program.

(10) Major space renovations--Renovations to all or part of the facility's instructional space where the scope of the work in the af-

affected part of the facility involves substantial renovations to the extent that most existing interior walls and fixtures are demolished and then subsequently rebuilt in a different configuration and/or function. Other renovations associated with repair or replacement of architectural interior or exterior finishes; fixtures; equipment; and electrical, plumbing, and mechanical systems are not subject to the requirements of subsections (d) and (e) of this section, but shall comply with applicable building codes as required by subsection (f) of this section.

(11) **Portable, modular building**--An industrialized building as defined by the Texas Occupations Code, §1202.003, or any other manufactured or site-built building that is capable of being relocated and is used as a school facility.

(12) **Square feet per student**--The net square footage of a room divided by the maximum number of students to be housed in that room during any single class period.

(13) **Square feet per room measurements**--The net square footage of a room includes exposed storage space, such as cabinets or shelving, but does not include hallway space, classroom door alcoves, or storage space, such as closets or preparation offices. The net square footage of a room shall be measured from the inside surfaces of the room's walls.

(14) **Abbreviations:**

- (A) ANSI--American National Standards Institute;
- (B) ICC--International Code Council; and
- (C) NFPA--National Fire Protection Association.

(b) **Implementation date.** The requirements for school facility standards shall apply to projects for new construction or major space renovations if:

(1) a board of trustees adopts a fiscal year maintenance and operations budget where a capital improvement project title and a design or design and construction budget are delineated;

(2) a board of trustees calls a bond election where one or more capital improvement project titles as well as design or design and construction budgets are delineated; or

(3) a new contract or amendment to an existing contract for architectural services for new construction or a major renovation for a school facility project has been agreed to, and signed and dated by both parties to the agreement after January 1, 2004, and before November 1, 2021.

(c) **Certification of design and construction.**

(1) In this section, the word "certify" indicates that the architect or engineer has reviewed the standards contained in this chapter and used the best professional judgment and reasonable care consistent with the practice of architecture or engineering in the State of Texas in executing the construction documents. The architect or engineer also certifies that these documents conform to the provisions of this section, except as indicated on the certification.

(2) The school district shall notify and obligate the architect or engineer to provide the required certification. The architect's or engineer's signature and seal on the construction documents shall certify compliance.

(3) To ensure that facilities have been designed and constructed according to the provisions of this section, each of the involved parties shall execute responsibilities as follows.

(A) The school district shall provide the architect or engineer the educational program and educational specifications ap-

proved by the board of trustees as required by this subchapter, and building code specifications for the facility. If a school district has a long-range school facility plan, it shall also be provided to the architect or engineer.

(B) The architect or engineer shall perform a building code search under applicable regulations that may influence the project, and shall certify that the design has been researched before it is final.

(C) The architect or engineer shall also certify that the facility has been designed according to the provisions of this section, based on the educational program, educational specifications, long-range school facility plan, building code specifications, and all documented changes to the construction documents provided by the district.

(D) The building contractor or construction manager shall certify that the facility has been constructed in general accordance with the construction documents specified in subparagraph (C) of this paragraph. If the school district acts as general contractor, it shall make the certification required by this paragraph.

(E) When construction is completed, the school district shall certify that the facility conforms to the design requirements specified in subparagraph (A) of this paragraph.

(F) The certifications specified in subparagraphs (A)-(E) of this paragraph shall be gathered on the "Certification of Project Compliance" form developed by the Texas Education Agency (TEA). The school district will retain this form in its files indefinitely until review and/or submittal is required by representatives of the TEA.

(d) **Space, minimum square foot, and design requirements.**

(1) A school district shall provide instructional space if required by the district educational specifications described in subsection (e) of this section.

(2) For each type of instructional space, a district shall satisfy the requirements of this section by using the standard for square feet per room specified in paragraph (5)(B)-(D) of this subsection. For school districts with facilities that have one or more classrooms with maximum class sizes that are normally less than 22 students at the elementary level and less than 25 students at the middle or high school level, the school districts may satisfy the requirements of this section for those classrooms by using the standard for the minimum square feet per student specified in paragraph (5)(B)-(D) of this subsection. These classrooms shall be designed on the basis of expected maximum class size, and not expected average class size. Upon submission by a district, alternate classroom designs with square feet per room measurements less than those specified in this subsection may be considered for approval by the TEA division responsible for state funding on a case-by-case basis.

(3) School districts should consider providing extra square footage in classrooms where the use on a regular basis of multiple computers, large furniture, televisions, mobile laptop carts, mobile video conferencing carts, monitors on carts, or the like is anticipated. To improve circulation and usability of classroom space, school districts with class sizes that are normally larger than 25 students for Grades 5-12 should also consider increasing the minimum classroom size by adding the appropriate minimum square feet per student specified in paragraph (5)(B)-(D) of this subsection for each student in excess of 25.

(4) Compliance with the standards specified in paragraph (5)(B)-(D) of this subsection will be evaluated based on the school district's intended full-time and/or part-time use of the areas, and not the name of the areas as identified in the construction documents.

(5) **Instructional area size and design requirements.**

(A) Design criteria. The school district shall provide the architect or engineer with all expected class sizes for the facilities, with the list of chemicals to be used in the science laboratories or science laboratory/classrooms, and with the number of computers anticipated in the library, so that the architect or engineer can adequately design the facilities to meet the criteria specified in subparagraphs (B)-(D) of this paragraph.

(B) General classrooms.

(i) Classrooms for prekindergarten-Grade 1 shall have a minimum of 800 square feet per room. School districts with small class sizes may have classrooms that provide a minimum of 36 square feet per student.

(ii) Classrooms at the elementary school level for Grades 2 and up shall have a minimum of 700 square feet per room. School districts with small class sizes may have classrooms that provide a minimum of 32 square feet per student.

(iii) Classrooms at the secondary school level shall have a minimum of 700 square feet per room. School districts with small class sizes may have classrooms that provide a minimum of 28 square feet per student.

(C) Specialized classrooms.

(i) A computer classroom used for the teaching of computer skills shall have a minimum of 900 square feet per room. The minimum room size is ideal for 25 students; 36 square feet per student should be added to the minimum square footage for each student in excess of 25. School districts with small class sizes may have computer classrooms that provide a minimum of 36 square feet per student. School districts should consider the heat output of computers when designing the ventilation system that serves a computer classroom.

(ii) Computer laboratories that are not used regularly for scheduled instruction but that are intended to support other instructional areas shall have a minimum of 25 square feet per computer station. For computer laboratories where the use of portable computers, such as laptop computers, is anticipated, the size may be reduced to 20 square feet per computer station.

(iii) The following provisions shall apply to combination science laboratories/classrooms, where each student has a lab station and where typically there is a clearly defined laboratory area and a clearly defined lecture area.

(I) Combination science laboratories/classrooms shall have a minimum of 900 square feet per room at the elementary school level. The minimum room size is adequate for 22 students; 41 square feet per student shall be added to the minimum square footage for each student in excess of 22.

(II) Combination science laboratories/classrooms shall have a minimum of 1,200 square feet per room at the middle school level. The minimum room size is adequate for 24 students; 50 square feet per student shall be added to the minimum square footage for each student in excess of 24.

(III) Combination science laboratories/classrooms shall have a minimum of 1,400 square feet per room at the high school level. The minimum room size is adequate for 24 students; 58 square feet per student shall be added to the minimum square footage for each student in excess of 24.

(IV) School districts with small class sizes may have combination science laboratories/classrooms that provide a minimum of 41 square feet per student but not less than 700 square feet total at the elementary school level, a minimum of 50 square feet per student

but not less than 950 square feet total at the middle school level, and a minimum of 58 square feet per student but not less than 1,100 square feet total at the high school level.

(iv) For districts that choose to use separate science classrooms and science laboratories, the following provisions shall apply.

(I) A science classroom shall be a minimum of 700 square feet regardless of grade level served.

(II) A science laboratory shall have a minimum of 800 square feet at the elementary school level. The minimum laboratory size is adequate for 22 students; 36 square feet per student shall be added to the minimum square footage for each student in excess of 22.

(III) A science laboratory shall have a minimum of 900 square feet at the middle school level. The minimum laboratory size is adequate for 24 students; 38 square feet per student shall be added to the minimum square footage for each student in excess of 24.

(IV) A science laboratory shall have a minimum of 1,000 square feet at the high school level. The minimum laboratory size is adequate for 24 students; 42 square feet per student shall be added to the minimum square footage for each student in excess of 24.

(V) Science classrooms shall be provided at a ratio not to exceed 2:1 of science classrooms to science laboratories at the middle school and high school levels. The science laboratories shall be located convenient to the science classrooms they serve.

(VI) School districts with small class sizes may have science classrooms that provide a minimum of 32 square feet per student, and they may have science laboratories that provide a minimum of 36 square feet per student but not less than 600 square feet total at the elementary school level, a minimum of 38 square feet per student but not less than 700 square feet total at the middle school level, and a minimum of 42 square feet per student but not less than 800 square feet total at the high school level.

(v) If hazardous or vaporous chemicals are to be used in the science laboratories or science laboratories/classrooms, a separate chemical storage room shall be provided. The chemical storage room shall be separate from, and shall not be combined as part of, a preparation room or an equipment storage room; however, the chemical storage room may be located so that access is through a preparation room or equipment storage room. The chemical storage room shall be secure to prevent access to chemicals by students. One chemical storage room may be shared among multiple laboratories or laboratories/classrooms.

(vi) Each school science laboratory, science classroom, science laboratory/classroom, science preparatory room, and chemical storage room shall include the following provisions.

(I) A built-in fume hood shall be provided in each high school level chemistry or advanced placement chemistry laboratory or laboratory/classroom. A built-in fume hood should also be provided in each high school level integrated physics and chemistry laboratory or laboratory/classroom. The exhaust shall be vented to the outside above the roof and away from air vents.

(II) A built-in eye/face wash that can wash both eyes simultaneously shall be provided in each room where hazardous chemicals are used by instructors and/or students. The eye/face wash shall comply with the ANSI Standards for Shower and Eyewash Equipment (Z358.1). The tepid water required by ANSI Z358.1 is not required to come from a heated source; however, school districts that commonly experience lengthy periods of extremely cold temperatures

during the winter season should consider a tepid water system with a heated source.

(III) A built-in safety shower shall be provided in each high school level chemistry or advanced placement chemistry laboratory or laboratory/classroom. A built-in safety shower should also be provided in each high school level integrated physics and chemistry laboratory or laboratory/classroom. The safety shower shall comply with the ANSI Standards for Shower and Eyewash Equipment (Z358.1). The tepid water required by ANSI Z358.1 is not required to come from a heated source; however, school districts that commonly experience lengthy periods of extremely cold temperatures during the winter season should consider a tepid water system with a heated source.

(IV) Ventilation systems serving science rooms shall be designed and constructed so that under normal operation the return air from the science rooms is not recirculated into non-science areas. In the chemical storage rooms, a ventilation system shall exhaust the air to the outside, and shall not be recirculated back into the space.

(V) An exhaust fan that is controlled by the instructor shall be provided in all rooms where hazardous or vaporous chemicals are to be used or stored. The exhaust fan shall be of sufficient size to exhaust the total volume of air in the room within 15 minutes. The exhaust shall be vented to the outside above the roof and away from air vents.

(VI) A minimum of 6 linear feet of total horizontal workspace, such as lab stations, lab tables, countertops, desktops, or some combination of these, shall be provided for each student in each middle school and high school science laboratory and science laboratory/classroom.

(VII) If electricity, gas, and/or water are provided in student areas, emergency shut-off controls shall be provided for each in a location accessible to the instructor but not easily accessible to students.

(vii) Special education classrooms shall have a minimum of 400 square feet per room. School districts with small class sizes may have rooms that provide a minimum of 40 square feet per student.

(viii) Specialized classrooms not otherwise identified within these standards shall at a minimum comply with the requirements specified in subparagraph (B) of this paragraph.

(ix) Compliance with the standards specified in clauses (iii) and (iv) of this subparagraph will be evaluated based on the average class size in those classrooms.

(D) Major support areas.

(i) Primary gymnasiums or physical education space, if required by the district's educational program, shall have a minimum of 3,000 square feet at the elementary school level; 4,800 square feet at the middle school level; and 7,500 square feet at the high school level.

(ii) A school district shall consider the School Library Standards and Guidelines as adopted under Texas Education Code, §33.021, when developing, implementing, or expanding library services. Libraries for campuses with a planned student capacity of 100 or less shall be a minimum of 1,400 square feet. Libraries for campuses with a planned student capacity of 101 to 500 shall be a minimum of 1,400 square feet plus an additional 4.0 square feet for each student in excess of 100. Libraries for campuses with a planned student capacity of 501 to 2,000 shall be a minimum of 3,000 square feet plus an additional 3.0 square feet for each student in excess of

500. Libraries for campuses with a planned student capacity of 2,001 or more shall be a minimum of 7,500 square feet plus an additional 2.0 square feet for each student in excess of 2,000. A school district that plans to locate more than 12 student computers in the library shall add 25 square feet of space for each additional computer anticipated. The space allotments within the library shall be based on a formula of 30% for the reading/instructional area and reference/independent study area; 45% for the stack area, circulation desk/area, and computer/online reference areas; and 25% for the necessary ancillary areas. Windows shall be placed so that adequate wall and floor space remains to accommodate the shelving necessary for the library collection size established by the School Library Standards and Guidelines.

(6) It is not the intent of these standards to limit the use of nontraditional, alternative, sustainable, and/or innovative school designs. A nontraditional design model is one that works to break down the scale of the school and to improve the connection of the student to the resources available within the school environment. If a school district chooses to use a nontraditional model, the following provisions shall apply.

(A) The instructional spaces where teachers will instruct groups of students in specialized coursework shall meet the standard, as appropriate based on group size, for square feet per room or for the minimum square feet per student specified in paragraph (5)(C) of this subsection.

(B) Large group lecture spaces that do not use tables or desks for the students shall have a minimum of 15 square feet per student. Large group lecture spaces that do use tables or desks for the students shall meet the standard, as appropriate based on group size, for square feet per room or for the minimum square feet per student specified in paragraph (5)(B) of this subsection. A minimum of 150 square feet shall be provided for each small group, conference, or office space area or room.

(C) An individual student learning area that is assigned to a specific student shall have a minimum of 35 square feet. An individual student learning area that is not assigned to a specific student shall have a minimum of 25 square feet.

(D) If necessary under the design model, up to half of the reading/reference area function of the library may be dispersed throughout the facility outside the normal library boundaries. The sum total square footage of all library-related areas shall meet the minimum square feet specified for libraries in paragraph (5)(D)(ii) of this subsection.

(7) Other space requirements should be developed from school district design criteria as required to meet educational program needs.

(e) Educational adequacy. A proposed new school facility or major space renovation of an existing school facility meets the conditions of educational adequacy if the design of the proposed project is based on the requirements of the school district's educational program, the educational specifications, and the student population that it serves.

(f) Construction quality.

(1) Districts with existing building codes.

(A) A school district located in an area that has adopted local construction codes shall comply with those codes (including building, fire, plumbing, mechanical, fuel gas, energy conservation, and electrical codes). The school district is not required to seek additional plan review of school facilities projects other than what is required by the local building authority. If the local building authority does not require a plan review, then a qualified, independent third

party, not employed by the design architect or engineer, shall review the plans and specifications for compliance with the requirements of the adopted building code. The plan review shall examine compliance conditions for emergency egress, fire protection, structural integrity, life safety, plumbing, energy conservation, and mechanical and electrical design. The review shall be conducted prior to the commencement of construction and must be conducted by a qualified building code consultant or a third party architect or engineer. A qualified building code consultant is a person who maintains, as a minimum, a current certification from the ICC. Associated fees shall be the responsibility of the school district. The reviewer shall prepare a summary list of any conditions not in conformance with the provisions of the adopted building code and is required to send a copy to the school district, design architect, or engineer. The design architect or engineer shall revise the plans and specifications as necessary and certify code compliance to the district. The reviewer, in his or her reasonable judgment and with the approval of the local building authority, may allow a limited number of variances from the codes if such variances do not negatively affect the quality or safety of the facility. Any disputes shall be a matter for contract resolution.

(B) For school facilities projects subject to these standards, and where not otherwise required by local code, fire alarm systems shall be provided. Fire alarm systems shall be designed and installed in accordance with applicable portions of the latest edition of the International Building Code (IBC) and International Fire Code (IFC).

(C) As part of their school facilities projects and where not otherwise required by local code, school districts should consider providing automatic sprinkler systems for fire protection, fire suppression, and life safety. In absence of a local code, each automatic sprinkler system shall be installed in accordance with the latest edition of the IBC and IFC.

(D) If the local building authority does not conduct reviews and inspections during the course of construction of the facility, then a qualified, independent third party, not employed by the design architect or engineer or contractor, should perform a reasonable number of reviews and inspections during the course of construction for compliance with the requirements of the adopted building code. The reviews and inspections should examine compliance conditions for emergency egress, fire protection, structural integrity, life safety, plumbing, energy conservation, and mechanical and electrical design. A qualified code inspector is a person who maintains, as a minimum, a current certification from the ICC as a combination commercial inspector and commercial energy inspector.

(2) Districts without existing building codes.

(A) A school district located in an area that has not adopted local building codes shall adopt and use the building code and related fire, plumbing, mechanical, fuel gas, and energy conservation codes from the latest edition of the family of International Codes as published by the ICC; and the National Electric Code as published by the NFPA. As an alternative, a school district may adopt the building code and related fire, plumbing, mechanical, fuel gas, and energy conservation codes as adopted by a nearby municipality or county. A qualified, independent third party, not employed by the design architect or engineer, shall review the plans and specifications for compliance with the requirements of the adopted building code. The plan review shall examine compliance conditions for emergency egress, fire protection, structural integrity, life safety, plumbing, energy conservation, and mechanical and electrical design. The review shall be conducted prior to the commencement of construction and must be conducted by a qualified building code consultant or a third party architect or engineer. A qualified building code consultant is a person who maintains, as a minimum, a current certification from

the ICC. Associated fees shall be the responsibility of the school district. The reviewer shall prepare a summary list of any conditions not in conformance with the provisions of the adopted building code and is required to send a copy to the school district, design architect, or engineer. The design architect or engineer shall revise the plans and specifications as necessary and certify code compliance to the district. The reviewer, in his or her reasonable judgment, may allow a limited number of variances from the codes if such variances do not negatively affect the quality or safety of the facility. Any disputes shall be a matter for contract resolution.

(B) For school facilities projects subject to these standards, fire alarm systems shall be provided. Fire alarm systems shall be designed and installed in accordance with applicable portions of the latest edition of the IBC and IFC.

(C) As part of their school facilities projects, school districts should consider providing automatic sprinkler systems for fire protection, fire suppression, and life safety. Each automatic sprinkler system shall be installed in accordance with the latest edition of the IBC and IFC.

(D) A qualified, independent third party, not employed by the design architect or engineer or contractor, should perform a reasonable number of reviews and inspections during the course of construction of the facility for compliance with the requirements of the adopted building code. The reviews and inspections should examine compliance conditions for emergency egress, fire protection, structural integrity, life safety, plumbing, energy conservation, and mechanical and electrical design. A qualified code inspector is a person who maintains, as a minimum, a current certification from the ICC as a combination commercial inspector and commercial energy inspector.

(3) Special provisions for portable, modular buildings. Any portable, modular building capable of being relocated that is purchased or leased for use as a school facility by a school district, whether that building is manufactured off-site or constructed on-site, must comply with all provisions of this section. Effective September 1, 2007, the following additional provisions shall apply to any portable, modular building that is purchased or leased for use as a school facility by a school district.

(A) A school district located in an area that has adopted local construction codes shall have the portable, modular building, including the construction of the foundation system and the erection and installation of the building on the foundation, inspected by the local building authority for compliance with the mandatory building codes or approved designs, plans, and specifications. The school district is not required to seek additional inspection of the portable, modular building other than what is required by the local building authority. If the local building authority does not perform inspections, then a qualified, independent third party, not employed by the design architect, engineer, contractor, or manufacturer, shall inspect the facility, including the construction of the foundation system and the erection and installation of the facility on the foundation, for compliance with the mandatory building codes or approved designs, plans, and specifications. The inspections shall be performed within 30 days of the completion of the construction, erection, and installation of the facility on the site, and the school district shall not occupy or use the facility until the independent third party makes a final determination that the facility is in compliance with all provisions of this section. For a manufactured portable, modular building that is an industrialized building as defined by the Texas Occupations Code, §1202.003, the factory inspection performed under the oversight of the Texas Department of Licensing and Regulation shall suffice to determine compliance of the building envelope with the mandatory building codes or approved designs, plans, and specifications in lieu of an inspection by the local building authority or an

independent third party for a portable, modular building constructed on or after January 1, 1986; however, an inspection of the construction of the foundation system and the erection and installation of the portable, modular building on the foundation shall still be performed.

(B) A school district located in an area that has not adopted local building codes shall have the portable, modular building, including the construction of the foundation system and the erection and installation of the building on the foundation, inspected by a qualified, independent third party, not employed by the design architect, engineer, contractor, or manufacturer, for compliance with the mandatory building codes or approved designs, plans, and specifications. The inspections shall be performed within 30 days of the completion of the construction, erection, and installation of the facility on the site, and the school district shall not occupy or use the facility until the independent third party makes a final determination that the facility is in compliance with all provisions of this section. For a manufactured portable, modular building that is an industrialized building as defined by the Texas Occupations Code, §1202.003, the factory inspection performed under the oversight of the Texas Department of Licensing and Regulation shall suffice to determine compliance of the building envelope with the mandatory building codes or approved designs, plans, and specifications in lieu of an inspection by an independent third party for a portable, modular building constructed on or after January 1, 1986; however, an inspection of the construction of the foundation system and the erection and installation of the portable, modular building on the foundation shall still be performed.

(C) A qualified, independent third party inspector is a person who maintains, as a minimum, a current certification from the ICC as a combination commercial inspector and commercial energy inspector.

(D) A school district that has purchased or leased a portable, modular building for use as a school facility on or after September 1, 2007, and before the effective date of this section, shall have the inspections required by this subsection performed within 60 days of the effective date of this section; any items of noncompliance identified during the inspections shall be brought into compliance by the school district within 90 days of the date of the inspections.

(4) Other provisions.

(A) For school facilities projects subject to these standards, an adequate technology, electrical, and communications infrastructure shall be provided. To ensure the adequacy of the infrastructure, the school district and the architect or engineer shall seek the input of the school district staff, including, but not limited to, the technology director, the library director, the program directors, the maintenance director, and the campus staff, in the planning and design of the infrastructure.

(B) As part of their school facilities projects, school districts should consider the use of designs, methods, and materials that will reduce the potential for indoor air quality problems. School districts should consult with a qualified indoor air quality specialist during the design process to ensure that the potential for indoor air quality problems after construction and occupancy of a facility is minimized. School districts should use the voluntary indoor air quality guidelines adopted by the Texas Department of State Health Services under the Texas Health and Safety Code, Chapter 385. School districts should also use the "Indoor Air Quality Tools for Schools" program administered by the U.S. Environmental Protection Agency.

(C) As part of their school facilities projects, school districts should consider the use of sustainable school designs. A sustainable design is a design that minimizes a facility's impact on the environment through energy and resource efficiency.

(D) School district facilities shall comply with the "Texas Accessibility Standards" as promulgated under the Texas Government Code, Chapter 469, Elimination of Architectural Barriers, as prepared and administered by the Texas Department of Licensing and Regulation.

(E) School district facilities shall comply with the provisions of the Americans with Disabilities Act of 1990 (Title I and Title II).

(F) School district facilities shall comply with all other local, state, and federal requirements as applicable.

§61.1040. School Facilities Standards for Construction on or after November 1, 2021.

(a) Definitions. The following words and terms, when used in this section, shall have the following meanings.

(1) Adjusted maximum instructional capacity--The maximum number of students who can be served at an instructional facility at any point in time as adjusted from the maximum instructional capacity based on the implementation of innovative instructional or operational practices.

(2) Architect--A person registered as an architect under Texas Occupations Code (TOC), Chapter 1051, and responsible for compliance with the architectural design requirements of TOC, Chapter 1051.

(3) Authority having jurisdiction--A state, local, or other regional department or an individual such as a fire marshal, building official, electrical inspector, or other individuals having statutory authority or authority assigned contractually by the school district to enforce specified building codes in accordance with subsection (j) of this section.

(4) Capital improvement project--Any school facility project consisting of new construction, major renovation, or minor renovation for which construction services are procured under Texas Government Code (TGC), Chapter 2269, in accordance with Texas Education Code (TEC), §44.031(a)(5).

(5) Contractor--A sole proprietorship, partnership, corporation, or other legal entity that:

(A) provides construction services and assumes the risk for constructing, rehabilitating, altering, or repairing all or part of a school facility at the contracted price;

(B) serves as the general contractor as defined in TGC, Chapter 2269;

(C) serves as a construction manager-at-risk as defined in TGC, Chapter 2269, Subchapter F;

(D) serves as a construction manager agent as defined in TGC, Chapter 2269, Subchapter E; or

(E) serves as a prime subcontractor for a project where the school district has contracted with a construction manager agent.

(6) Design guidelines or standards--A written document comprised of standardized information developed by the school district, possibly in partnership with consultants, often adopted by a school district board of trustees and provided to the design professional of record for reference on capital improvement projects. It includes, but is not limited to:

(A) the instructional programs, grade configuration, and types of facilities in the school district;

(B) a schedule of the estimated number and approximate size of all instructional and support spaces included in each facility and extracurricular activities;

(C) provisions for outdoor instruction;

(D) adjacencies diagram(s) defining relationships between functions at the facilities; and

(E) technical standards related to functional requirements, systems, manufacturers, products, and finishes.

(7) Design professional--An architect or engineer as defined in this subsection.

(8) Designated representative--A person designated by a school district board of trustees to act as the official representative of the district, in accordance with TEC, §44.0312, and TGC, §2269.053, who has the express authority to act and bind the school district, to the extent and for the purposes described in the contract for school facility design and construction services, including responsibilities for general administration of the contract and required school district certifications for educational adequacy, space, and construction quality.

(9) Engineer--A person registered as an engineer under TOC, Chapter 1001, and responsible for compliance with engineering design requirements and other applicable requirements of TOC, Chapter 1001.

(10) Hazardous chemical--This term has the meaning assigned in Texas Health and Safety Code, §502.003(13).

(11) Inclusive design--Design that considers the broad spectrum of human diversity with respect to ability, age, culture, gender, language, and other forms of human difference.

(12) Instructional facility--This term has the meaning assigned in TEC, §46.001, and includes any real property, an improvement to real property, or a necessary fixture of an improvement to real property that is used predominantly for teaching curriculum under TEC, §28.002.

(13) Instructional space--All interior general learning spaces, including general classrooms, collaboration spaces, specialized classrooms, and laboratories. Outdoor instructional space may be provided at an instructional facility but may not be used to meet minimum aggregate space requirements in either method of compliance in subsections (h) and (i) of this section. Certain major support spaces may be classified as instructional space for purposes of complying with subsection (i) of this section.

(14) Major renovation--A project for the construction, addition, rehabilitation, alteration, or repair of an existing school facility that exceeds \$50,000 and requires the school district to hire an architect and an engineer.

(15) Maximum instructional capacity--The maximum number of students who can be served by an instructional facility at any point in time.

(16) Maximum student enrollment--The maximum number of students a school district expects to enroll at an instructional facility. For the quantitative method of compliance, maximum student enrollment must equal the maximum instructional capacity. For the qualitative method of compliance, maximum student enrollment is allowed to be higher than the maximum instructional capacity.

(17) Minor renovation--A project for the construction, addition, rehabilitation, alteration, or repair of an existing school facility that exceeds \$50,000 and for which a school district is required to hire an engineer but not an architect. If the scope of work for the minor

renovation project expands in the type and way that requires the hiring of an architect, the project must be reclassified as a major renovation. If the scope of work for the minor renovation requires that additional safety and security standards under subsection (k)(2) of this section be included in the scope of work of the project and those additional safety and security standards require the hiring of an architect, the project does not require reclassification as a major renovation.

(18) Modular, portable building--An industrialized building as defined by TOC, §1202.002 and §1202.003; any relocatable educational facility as defined by TOC, §1202.004, regardless of the location of construction of the facility; or any other manufactured or site-built building that is capable of being relocated and is used as a school facility.

(19) New construction--A project for the design and construction of a new school facility to be used for administrative, assembly, educational, or other occupancy for which a school district board of trustees is required to hire an architect, or the installation of a modular building regardless of whether an architect is required.

(20) Non-designated entry--A door that is not operable from the exterior and is designed to only allow for emergency egress.

(21) Non-instructional assembly facility--A non-instructional facility where large populations of occupants congregate such as arenas, performing arts centers, and stadiums.

(22) Non-instructional facility--Administrative buildings, transportation centers, and other support facilities that are not used predominately for teaching curriculum.

(23) Open-enrollment charter school--This term has the meaning assigned in §100.1001(3) of this title (relating to Definitions).

(24) Primary entrance--

(A) the main entrance to an instructional facility that is closest to or directly connected to the reception area;

(B) any exterior door the school district intends to allow visitors to use to enter the facility during school hours either through policy or practice; or

(C) any exterior door the school district intends to allow to remain unlocked during school hours.

(25) Prime design professional--The registered design professional engaged by a school district or school district's authorized agent to coordinate certain aspects of the project requiring review by the building official or third-party code compliance officer for compatibility of the design of the building or structure with applicable building codes, including the coordination of submittal documents prepared by others, deferred submittal documents, and phased submittal documents.

(26) Project construction budget--The total aggregate dollars to be spent to execute the design and construction of a capital improvement project, as approved by the school district at the completion of design development to establish the compliance thresholds under subsection (k) of this section in accordance with the requirements of subsection (k)(2) of this section.

(27) School district--The board of trustees of an independent school district or its designated representative, as permitted.

(28) School facility--Any instructional facility, specialized instructional facility, non-instructional assembly facility, non-instructional facility, or any other facility owned or operated by a school district.

(29) School level--

(A) elementary school level--an instructional facility or specialized instructional facility that includes some or all grades from prekindergarten through Grade 5 or Grade 6;

(B) middle school level--an instructional facility or specialized instructional facility that includes some or all grades from Grade 6 through Grade 8 or Grade 9, or only includes Grade 6;

(C) high school level--an instructional facility or specialized instructional facility that includes some or all grades from Grade 9 or Grade 10 through Grade 12, or only includes Grade 9; and

(D) secondary level--an instructional facility or specialized instructional facility that includes some or all grades from Grade 6 through Grade 12.

(30) Secondary entrance--Any exterior door that is not one of the following:

(A) a primary entrance; or

(B) a door that is not operable from the exterior and is designed to allow only for emergency egress.

(31) Specialized instructional facility--An instructional facility with a specialized educational purpose such as agricultural barns.

(32) Square feet per room--The net square footage of a space, including exposed storage space such as cabinets or shelving, but not including hallway space, classroom door alcoves, or storage space such as closets or preparation offices. The net square footage of a room shall be measured from the inside surfaces of the room's walls.

(33) Square feet per student--The net square footage of a room divided by the maximum number of students to be housed in that room during any period of time during school hours.

(34) Third-party code compliance officer--A person who a school district has contracted with and designated to have all of the duties and powers of a building official, as defined by required construction codes, to the extent allowable by state law, to enforce compliance of any required construction code provision that is not enforced by a state or local authority having jurisdiction.

(b) Applicability.

(1) The school facilities standards established in this section shall apply to all school district capital improvement projects as follows, regardless of the type of school facility or the type of construction delivery method used by the district.

(A) A school district capital improvement project of any type or size relating to a school facility subject to this section must comply with applicable requirements established in subsections (d), (e), (f), (j), and (k) of this section.

(B) A project for new construction or major renovation at an instructional facility must comply with the requirements established in subsections (d), (e), (f), (g), (j), and (k) of this section and one of the methods required to demonstrate compliance with minimum space requirements established in subsections (h) and (i) of this section.

(C) A project for minor renovation at an instructional facility must comply with applicable requirements established in subsections (d)(1), (e), (f), (j), and (k) of this section.

(D) A project for new construction, major renovation, or minor renovation at a specialized instructional facility, non-instructional facility, or non-instructional specialized assembly facility must comply with applicable requirements established in subsections (d)(1), (e), (f), (j), and (k) of this section.

(E) A project for major renovation that includes minor scopes of work in an area of a school facility that is separate and distinct from the project scope of the major renovation may be performed as a part of a construction services contract for the major renovation without the minor scope of work becoming subject to the standards in subsections (g), (h), or (i) of this section if:

(i) the minor scopes of work would not, on a stand-alone basis, be considered a major renovation project; and

(ii) the cost of the minor scopes of work is included in the total cost of the project construction budget to determine the appropriate scope of work to be included in the project, as specified in subsection (k)(1)(B) of this section.

(2) A capital improvement project for an instructional facility of an open-enrollment charter school is subject to subsection (k) of this section and all applicable laws for an open-enrollment charter school facility but is not subject to subsections (c)-(j) of this section.

(c) Implementation.

(1) The school facilities standards established in this section shall apply to a capital improvement project for which at least one of the following has occurred on or after November 1, 2021:

(A) a board of trustees adopts a fiscal year maintenance and operations budget where a capital improvement project title and a design or design and construction budget are delineated;

(B) a board of trustees calls a bond election where one or more capital improvement project titles and design or design and construction budgets are delineated; or

(C) a new contract or amendment to an existing contract for architectural services for new construction or a major renovation project or a contract for engineering services for a major renovation or minor renovation has been agreed to and signed and dated by both parties to the agreement.

(2) A school district board of trustees may elect to treat a capital improvement project, for which an action listed in paragraph (1) of this subsection was taken prior to November 1, 2021, under standards established in §61.1036 of this title (relating to School Facilities Standards for Construction before November 1, 2021) or under the standards established in this section. If an election to comply with this section is made by a board of trustees, the school district and architect may mutually agree that the contract for design services may be adjusted and then must signify in writing that the project will become subject to the facilities standards established in this section through an affirmative indication on the required certification form for the project or through some other written document or addendum to the contract signifying election under this section and any modifications to the contract terms agreed to by the parties.

(3) If a school district board of trustees makes an election to comply with §61.1036 of this title under paragraph (2) of this subsection, it may still elect to comply with subsection (k) of this section.

(4) A school district shall consider implementing the safety and security standards under subsection (k) of this section for any safety and security upgrades to an existing instructional facility that does not require compliance with this section.

(d) Educational adequacy.

(1) Long-range facility plan. A school district shall ensure that a capital improvement project subject to this section complies with the requirements and standards as follows.

(A) Elements. The long-range facility plan shall include all of the following elements that apply to the facility and project and must also be updated prior to commencement of construction to include the access control document required in subsection (k)(1)(B) of this section:

(i) existing and proposed instructional programs at the project campus, including special education, dual language, course offerings, and partnerships;

(ii) the age and condition of all buildings and systems at the project campus;

(iii) history of completed capital improvement projects at the facility;

(iv) site evaluation of the project campus, including, but not limited to, overall site; shape; useable land; suitability for intended use as well as planned improvements; adequate vehicular, pedestrian, and emergency access; queueing; parking; and site amenities;

(v) the school district's educational specifications;

(vi) the school district's enrollment projections, maximum student enrollment of the facility, and the facility's maximum instructional capacity, if applicable; and

(vii) the noncompliance, partial compliance, or full compliance with each of the safety and security standards required in subsection (k) of this section.

(B) Process. The process of developing the long-range facility plan shall consider input from teachers, students, parents, taxpayers, and other school district stakeholders.

(C) Compliance. The requirement for a long-range facility plan is met when a school district completes the long-range facility plan, presents it to the school district board of trustees, and makes it available to the prime design professional for a capital improvement project. The long-range facility plan expires after five years from the date of the final plan presented to the school district board of trustees and must be updated prior to commencement of a subsequent capital improvement project. A long-range facility plan developed as part of a district-wide long-range facilities plan may be used to satisfy this requirement.

(2) Educational specifications. A school district shall ensure that a project for new construction and major renovation subject to this section complies with the requirements and standards as follows.

(A) Elements. Educational specifications are a written document prepared by the school district and approved by the school district board of trustees and shall include all of the following:

(i) the school district mission, vision, goals, and pedagogy;

(ii) preliminary details related to facility type, grades served, and maximum student enrollment;

(iii) pertinent provisions of the multi-hazard emergency operations plan that may inform the functionality of the built environment, including how the district complies with TEC, §37.108;

(iv) a written statement that includes:

(I) inclusive design goals and considerations supported by the school district; and

(II) how inclusive design should be addressed in new and renovated facility designs;

(v) minimum total square footage required to comply with the quantitative method of compliance; and

(vi) innovative teaching or operational practices intended for implementation at the instructional facility that may lead to the use of the qualitative method of compliance.

(B) Schedule. An educational specification shall be created for each campus type. If the design and construction of a new campus or major renovation of an existing campus differs substantially from an educational specification that exists for the same campus type, a separate educational specification must be developed. Educational specifications shall be initiated upon the first proposed project of its type and must be completed prior to initiating the planning or programming phase of a project. Each educational specification must be updated after five years from the date of approval.

(C) Compliance. The requirement for educational specifications is met when a school district delivers the approved document to the architect.

(3) Exceptions. A school district is exempt from the requirements of this subsection:

(A) if a school facility experiences catastrophic damage and the school district board of trustees approves a capital improvement project in accordance with TEC, §44.0312(c); or

(B) in a situation deemed urgent by action of the school district board of trustees that warrants immediate action because, if left unresolved, it would impair the conduct of classes.

(e) Administration.

(1) Administration of construction quality standards.

(A) This subsection establishes standards for the administration and procurements of design professional services and other professional services and for the administration of competitive bids and contracting requirements for construction services. A school district shall comply with requirements in this subsection and with all applicable requirements, restrictions, and responsibilities established in state law, administrative code, or by a local authority having jurisdiction.

(B) A school district shall comply with the administrative and procedural requirements established in this subsection and with the standards established in subsection (j) of this section to promote construction quality and best value for a capital improvement project subject to this section.

(C) A standard in this section that incorporates by reference a key statutory provision or administrative rule is established as a compliance requirement for a school district seeking to procure, obtain a competitive bid, or administer a contract for construction services, construction-related services, design professional services, or any other professional service required for a capital improvement project. The requirements establish a method by which a school district shall demonstrate compliance with the requirements in this subsection and with the construction quality standards and construction code requirements in subsection (j) of this section. Any express reference to, or omission of, an applicable statutory provision in this subsection may not be construed to diminish, alter, or abate a provision of law applicable to a school district or to a school district capital improvement project subject to this section.

(2) School district requirements and responsibilities.

(A) In accordance with TEC, §46.003(g), the board of trustees and voters of a school district shall determine district needs concerning construction, acquisition, renovation, or improvement to

instructional facilities. School district funding is entrusted to the district by the taxpayers, and a district must ensure procurement processes and procedures are transparent and provide the best value to the district by complying with applicable laws governing procurement of professional design services and construction services and with the standards established in this subsection to promote construction quality.

(B) In accordance with TEC, §11.201, a superintendent shall oversee and ensure compliance with the standards for school facilities established in this section pursuant to TEC, §46.008, and shall ensure board consideration for any action specified as being required to be made by the board of trustees, whether by statute, board rule, or other applicable requirement.

(C) In accordance with TEC, §44.0312(b), a board of trustees may not delegate the authority to act regarding an action authorized or required by TEC, Chapter 44, Subchapter B, to be taken by a board of trustees of a school district.

(D) In accordance with TEC, §44.0312(a), a board of trustees of a school district may, as appropriate, delegate its purchasing and contracting authority under TEC, Chapter 44, Subchapter B, regarding an action authorized or required to be taken by a school district or a designated person, representative, or committee.

(E) In accordance with TEC, §44.0312(a), when procuring construction services for a capital improvement project, a school district board of trustees shall provide notice of the delegation and the limits of the delegation in the request for bids, proposals, or qualifications or in an addendum to the request. If the school district fails to provide that notice, a ranking, selection, or evaluation of bids, proposals, or qualifications for construction services other than by the board of trustees in an open public meeting is advisory only.

(F) A superintendent shall ensure that a requirement to specify the level of delegation of authority is included in the bid specifications when procuring construction services to select a contractor, in accordance with TEC, §44.0312.

(G) In accordance with TEC, §44.0312(c), in the event of a catastrophe, an emergency, or a natural disaster affecting a school district, the board of trustees of the district has all authority to delegate to the superintendent or designated representative the authority to contract for the replacement, construction, or repair of school equipment or facilities under TEC, Chapter 44, Subchapter B, if emergency replacement, construction, or repair is necessary for the health and safety of district students and staff.

(H) In accordance with TEC, §44.031(d), and TGC, §2269.051, a school district may adopt rules as necessary to implement the management responsibilities and duties established for school district procurement and delivery of professional design and construction services for a capital improvement project.

(3) Requirements for construction services.

(A) In accordance with TEC, §44.031, the award of a school district contract for construction services or construction-related services valued at \$50,000 or more must be made by competitive bid or by the construction delivery contracting method established in TGC, Chapter 2269, that provides the best value for the district.

(B) In accordance with TGC, §2269.056(a), a school district that is considering a construction contract using a method of procuring construction services other than by competitive bid must first, before advertising, determine which contracting method for construction services contained in TGC, Chapter 2269, provides the best value to the school district for the project.

(C) A school district is required to consider certain factors established in TGC, §2269.056(b), if the district engages in consideration of a construction delivery contracting method other than competitive bidding to evaluate best value for the district, and the district must adhere to the requirements specified for each type of construction delivery contracting method established in TGC, Chapter 2269, Subchapters D, E, F, and G, and must determine, prior to utilization, the best value for the district. A school district shall comply and adhere in full to the requirements specified for each construction delivery contracting method.

(D) A school district shall ensure a contract for construction services required to be procured by a method in TGC, Chapter 2269, specifies the contractor's responsibilities for site safety and requires compliance with the requirement to provide workers' compensation insurance in accordance with Texas Labor Code, §406.096.

(E) In accordance with TGC, §2252.063 and §2252.064, a school district shall ensure that a contract with a general contractor requires the contractor to provide to the district annual payment statements derived from sales tax reports and to execute a bond issued by a surety company authorized to do business in the state of Texas in an amount determined by the school district, which may not exceed the contract price. The bond must be payable to the school district and conditioned on the faithful performance of the terms of the contract.

(F) If a school district selects the design build method of construction delivery, the district shall procure a design professional, independent of the contractor, to act as the school district's representative for the procurement process and for the duration of the construction in accordance with TGC, §2269.355.

(G) In accordance with TGC, §2269.408(a), if a job order contract or an order issued under the contract requires architectural or engineering services that constitute the practice of architecture or engineering, the school district shall select or designate an architect or engineer, in accordance with TGC, Chapter 2254, to prepare the construction documents for the project. In accordance with TGC, §2269.408(b), TGC, §2269.408(a), does not apply to a job order contract or an order issued under the contract for industrialized buildings or relocatable educational facilities subject to and approved under TOC, Chapter 1202, if the contractor employs the services of an architect or engineer who approves the documents for the project.

(4) Requirements for design professional services.

(A) In accordance with TGC, §2269.102, a school district seeking to issue a request for competitive bids for construction services shall first select or designate an architect or engineer, in accordance with TOC, Chapter 1051 or Chapter 1001, as applicable, to prepare the construction documents required for a capital improvement project to be awarded by competitive bid.

(B) A capital improvement project that contains architectural or engineering services, as defined by TOC, Chapter 1051 or Chapter 1001, as applicable, must use the professional services of an architect or engineer, or both, as required by the scope of the project.

(C) When architectural or engineering services are required, a school district shall procure architectural or engineering services from a design professional in accordance with TGC, §2254.004. A design professional may subcontract another design professional to perform architectural or engineering services as part of the scope of services that the subcontracting design professional is providing to a school district. A school district shall require that an architect perform architectural services in accordance with TOC, Chapter 1051, to prepare construction documents required for a new construction or major

renovation project for a school facility. A school district shall require that an engineer perform engineering services in accordance with TOC, Chapter 1001, to prepare engineering plans and specifications documents required for a minor renovation, major renovation, or a new construction project for a school facility.

(D) A school district shall designate one design professional to be the prime design professional for a capital improvement project and shall contractually engage the prime design professional to review and coordinate the design of the project, allowing the prime design professional to rely on and contract for other design professionals where appropriate.

(E) A school district shall ensure a contract for professional design services for a capital improvement project contains the scope of services defined with reasonable specificity, including contractual time parameters, milestones, or deadlines and shall ensure that contract terms conform to the standard of care established in Local Government Code, §271.904, which requires architectural and engineering services to be provided with the professional skill and care ordinarily provided by competent architects or engineers practicing under same or similar circumstances and professional license.

(F) In accordance with TOC, §1051.703(d), designation as the "prime design professional" does not expand, limit, or otherwise alter the scope of a design professional's practice nor does it allow a design professional to fulfill the requirements of a professional license for which they have not been lawfully granted.

(5) Requirements for professional services of third-party consultants.

(A) When procuring the professional services of a third-party consultant for a capital improvement project, a school district must adhere to the requirements established in TGC, Chapter 2269.058, and this section. A school district is required to select a qualified provider of a professional service for which it contracts under this subsection in accordance with TGC, Chapter 2254.

(B) A school district shall require any design professional contractually engaged to procure professional design services from any other design professional as a subconsultant to select and subcontract the professional design services based on the qualification-based selection process established in TGC, Chapter 2254.

(C) A school district shall ensure, through confirmation from a local or state building official or a third-party code compliance officer as provided for in subsection (j)(2) of this section, that all required inspections, testing, or permits required for a capital improvement project have been performed in accordance with contractual terms and in accordance with all applicable building code specifications.

(D) In accordance with TGC, §2269.058, a school district shall, independently of the contractor, construction manager-at-risk, or design-build firm, provide or contract for the construction materials engineering, testing, and inspection services and the verification testing services necessary for acceptance of the facility by the district.

(E) A school district shall ensure, through confirmation from a local or state building official or a third-party code compliance officer, that all code compliance issues and requirements for a capital improvement project have been addressed or performed, including inspections, testing, and permits that are required.

(F) Any contract with a third-party code compliance officer shall be in accordance with terms and requirements specified by the International Code Council and shall be procured in accordance with TGC, Chapter 2254, as required by TGC, §2269.058.

(G) A building permit or local government fee for code compliance, a contract with a third-party code compliance officer, a third-party inspector, or consultant shall be the obligation and responsibility of the school district, procured in accordance with TGC, Chapter 2254, as required by TGC, §2269.058, and consistent with the terms of subsection (j) of this section.

(H) In accordance with TEC, §44.901 and §44.902, a school district may contract for energy or water conservation measures and must procure the services for energy or water savings performance contracts according to the procedures established for professional services in TGC, §2254.004.

(6) Contract compliance and construction quality control assurances. A school district shall ensure that services sought by or provided to the district for a school facility capital improvement project, including, but not limited to, professional design services, construction services, construction administration services, third-party inspection services, third-party testing services, or third-party code compliance services, are provided through a project-specific written agreement that:

(A) conforms to applicable state laws and any requirements, standards, or codes adopted by a local authority having jurisdiction;

(B) contains all services required to be provided in the agreement, prohibits the school district from waiving any services or directing any changes where recommended by an applicable design professional, and requires all changes to the construction documents to be documented in writing and signed by the prime design professional, the contractor, and the school district;

(C) specifies the level of observation, testing, and documentation required to be conducted through the agreement to determine and certify conformance and completion of services provided;

(D) requires the use of a prime design professional to coordinate and prepare a proposed statement of any special inspections or testing required in accordance with the required construction codes, customizing the proposed statement based on knowledge about the project regardless of whether the statement requires testing and inspection to be less than the default requirements of the required construction codes, including materials testing, project-specific requirements for special inspections and testing, specific wind and seismic requirements, frequency of the special inspections, or tests to be performed in accordance with the referenced standard defining the inspection;

(E) ensures that construction documents are of sufficient clarity to indicate the timing, location, nature, and extent of specific inspections and tests required to be performed by the school district through the local authority having jurisdiction, the third-party code compliance officer, any third-party special inspector or inspection agency, or the prime design professional if qualified as a special inspector and specified as a contractual term;

(F) ensures that a building permit is issued by a local authority having jurisdiction or a third-party code compliance officer in which a building permit shall be considered by the school district to indicate that the proposed statement of special inspections is approved and constitutes the code-required inspections and tests;

(G) requires the contractor, before beginning construction, to submit to the school district, prime design professional, and the building official or third-party code compliance officer an acknowledgment of the contractor's responsibility to notify quality assurance personnel that will be performing inspections and tests when the project is ready for those specific inspections and tests and the contractor's re-

sponsibility to request and obtain a final report from each quality control person performing the code-required inspections and tests before requesting a certificate of occupancy;

(H) requires third-party inspectors to perform the code-required inspections and tests, to submit inspection and testing reports to the school district and the prime design professional, and to submit a final report to the school district, prime design professional, building official or third-party code compliance officer, and contractor, upon request by the contractor, indicating any known deficiencies discovered during the project that have not yet been addressed at the time of the request;

(I) requires special inspection and testing reports to be submitted to the building official and the prime design professional and any discrepancies to be brought to the attention of the contractor, and if not corrected, to be brought to the attention of the building official, the prime design professional, and the school district;

(J) specifies treatment for timely performance and documentation required in response to requests for information, change documents, or change orders;

(K) specifies payment certification provisions requiring notarized contractor signature on the application for Certificate of Substantial Completion and specifies that the school district must provide certification of payment for any of the school district's separate consultants or contractors;

(L) requires clear indication of the date of substantial completion on the payment certification, specifies the punch list provided by the contractor to address all remaining areas of the project, and documents all known school district accepted nonconforming work;

(M) limits required certifications of work requested or required by the school district to work required under the issuing party's services agreement;

(N) ensures that contract terms for design professional services are consistent and aligned and do not conflict or overlap with regard to contractual responsibilities assigned to the prime design professional, any design professional of record, the contractor, any prime subcontractors, a third-party building code compliance officer, or a third-party special inspector or consultant; and

(O) ensures appropriate specifications or treatment for the school district's acceptance or acknowledgement of a contractor's final completion as the owner of the facility.

(f) Certification of compliance with the school facilities standards.

(1) A school district, design professional, contractor, and prime subcontractors, if applicable, shall certify compliance with all applicable standards required in subsections (d) and (g)-(k) of this section as follows.

(A) School district certifications.

(i) Certifications related to educational adequacy under subsection (d) of this section.

(I) To provide an educationally adequate school facility, the school district shall certify compliance that the long-range facility plan was developed, presented to the school district board of trustees, and provided in a timely manner to the prime design professional.

(II) To provide an educationally adequate instructional facility or specialized instructional facility, the school district shall certify compliance that the educational specifications

were developed, approved by the school district board of trustees, and provided in a timely manner to the architect.

(III) To provide an educationally adequate school facility, the school district shall certify compliance that a capital improvement project has been designed by the design professional of record in reasonable accordance to meet the goals and expectations established in the long-range facility plan and, if applicable, educational specifications.

(ii) Certifications related to standards for space for instructional facilities under subsection (g) of this section and standards associated with the method of compliance for instructional facility space approved by the school district board of trustees under the quantitative method of compliance in subsection (h) of this section or the qualitative method of compliance in subsection (i) of this section.

(I) To provide adequate instructional spaces, where required, the school district shall certify compliance with applicable provisions of subsection (g) of this section.

(II) To provide adequate space in instructional facilities, the school district shall certify that the most appropriate method of compliance was presented to and approved by the school district board of trustees prior to commencement of design development.

(iii) Certifications related to safety and security standards under subsection (k) of this section. To continue to provide a safe and secure environment, the school district shall certify compliance with the applicable safety and security standards in subsection (k) of this section approved by the school district and provided as directives in a timely manner to the prime design professional and to other design professionals of record, contractors, and prime subcontractors.

(B) Design professional certifications.

(i) Certifications related to educational adequacy under subsection (d) of this section. The design professional of record for a capital improvement project shall certify compliance that the project has been designed in reasonable accordance with the long-range facility plan and educational specifications, if applicable.

(ii) Certifications related to standards for space for instructional facilities under subsection (g) of this section and to standards associated with the method of compliance approved by the school district board of trustees for instructional facility space under subsection (h) of this section related to the quantitative method of compliance or under subsection (i) of this section related to the qualitative method of compliance. To provide adequate instructional spaces and adequate space in instructional facilities, the architect of record shall certify compliance that the project has been designed in reasonable accordance with the standards for space in subsection (g) of this section and with the standards associated with the method of compliance approved by the school district board of trustees under subsection (h) or (i) of this section.

(iii) Certifications related to safety and security standards under subsection (k) of this section. A design professional of record shall certify compliance that the project has been designed in reasonable accordance with any required safety and security directives approved by the school district in accordance with subsection (k) of this section.

(C) Contractor certifications.

(i) Process certifications. To ensure construction quality and performance of contract terms, the contractor and prime subcontractors, if applicable, shall certify compliance that the project has been built in conformance with the contract documents.

(ii) Certifications related to construction quality standards under subsection (j) of this section.

(I) To ensure compliance with construction quality standards, the contractor and prime subcontractors, if applicable, shall certify compliance at the completion of a capital improvement project that the project has been built in conformance with the contract terms and performance standards specified by the contract documents for the general contractor and for any of its subcontractors or subconsultants of any tier, which shall include certification of compliance with any subsequent change order documents approved by the owner and the design professional of record.

(II) Where a third-party code compliance officer is required by subsection (j) of this section, to ensure that a third-party code compliance officer does not find any violations of the provisions of the required construction codes identified in subsection (j)(1) of this section that are not enforced by a state or local authority having jurisdiction, a school district shall require that a third-party code compliance officer issue a third-party certificate of occupancy. Where a local authority having jurisdiction enforces some of the required construction codes, a third-party code compliance officer shall not issue a third-party certificate of occupancy until either the local authority having jurisdiction has issued a certificate of occupancy or the local authority having jurisdiction indicates in writing to the third-party code compliance officer that the local authority having jurisdiction does not issue certificates of occupancy.

(iii) Certifications related to safety and security standards under subsection (k) of this section. To provide a safe and secure environment, the contractor and prime subcontractors, if applicable, shall certify compliance that the project has been built in reasonable accordance with the safety and security directives provided by the school district and reflected in the contract documents prepared by the design professional.

(iv) Special provisions for a construction manager agent. For projects that use the construction manager agent contracting method established in TGC, Chapter 2269, Subchapter E, the construction manager agent and each construction prime contractor must provide certification in accordance with clause (i) of this subparagraph, and each shall certify the scope of work for which they are contractually responsible.

(2) General provisions.

(A) For projects that use the construction manager agent contracting method established in TGC, Chapter 2269, Subchapter E, the construction manager agent and each construction prime contractor must provide certification in accordance with paragraph (1)(C)(i) of this subsection, and each shall certify the scope of work for which they are contractually responsible.

(B) The certification requirements specified for a school facility capital improvement project in this subsection shall be expressed on a form developed by the Texas Education Agency that identifies the appropriate certifications required for a capital improvement project based on the facility, project type, and method of contracting established in TGC, Chapter 2269, for the procurement of construction services approved by the school district board of trustees for the project. The form must include written certification requirements for a design professional of record, a general contractor, construction manager-at-risk, a design build firm, a construction manager agent, a prime contractor or subcontractor.

(g) Standards for space for instructional facilities.

(1) Minimum standards for common areas.

(A) Library.

(i) A school district shall consider the School Library Standards and Guidelines as adopted under TEC, §33.021, when developing, implementing, or expanding library services.

(ii) The sum total square footage of all library-related areas shall meet the following minimum square feet (SF) requirements based on maximum instructional capacity and may be contiguous or dispersed:

(I) for 100 students or fewer, a minimum of 1,400 SF;

(II) for 101-500 students, 1,400 SF plus an additional 4 SF for each student in excess of 100;

(III) for 501-2,000 students, a minimum of 3,000 SF plus an additional 3 SF for each student in excess of 500; and

(IV) for 2,001 or more students, a minimum of 7,500 SF plus an additional 2 SF for each student in excess of 2,000.

(B) Gymnasium. Primary gymnasiums or physical education space, if required by the school district's educational program, shall have a minimum of 3,000 SF at the elementary school level, 4,800 SF at the middle school level, and 7,500 SF at the high school level.

(2) Minimum standards for special spaces.

(A) Combination science classroom/laboratory.

(i) A combination science classroom/laboratory for Kindergarten-Grade 5 must provide a minimum of 50 SF per student. The room may have an established maximum of 22 students but must not exceed 25. Within the total square footage of the room, 6 SF per student of horizontal laboratory countertop space (3 feet wide x 2 feet deep) must be provided at student laboratory benches, and an additional 3 linear feet (LF) per student of horizontal laboratory countertop support space must be provided for equipment and materials for investigations, activities, or student projects.

(ii) A combination science classroom/laboratory for Grades 6-8 must provide a minimum of 58 SF per student. The room may have an established maximum of 24 students but must not exceed 28. Within the total square footage of the room, 6 SF per student of horizontal laboratory countertop space (3 feet wide x 2 feet deep) must be provided at student laboratory benches, and an additional 3 LF per student of horizontal laboratory countertop support space must be provided for equipment and materials for investigations, activities, or student projects.

(iii) A combination science classroom/laboratory for Grades 9-12 must provide a minimum of 58 SF per student. The room may consider a maximum of 24 students but must not exceed 28. Within the total square footage of the room, 6 SF per student of horizontal laboratory countertop space (3 feet wide x 2 feet deep) must be provided at student laboratory benches, and an additional 3 LF per student of horizontal laboratory countertop support space must be provided for equipment and materials for investigations, activities, or student projects.

(B) Science laboratory.

(i) The separate science laboratory and classroom configuration is not permissible at the elementary level.

(ii) A science laboratory for Grades 6-8 must be a minimum of 42 SF per student. The room must consider a maximum of 24 students but must not exceed 28. Within the total square footage of the room, 6 SF per student of horizontal laboratory countertop space (3 feet wide x 2 feet deep) must be provided at student laboratory benches,

and an additional 3 LF per student of horizontal laboratory countertop support space must be provided for equipment and materials for investigations, activities, or student projects.

(iii) A science laboratory for Grades 9-12 shall be a minimum of 42 SF per student. The room must consider a maximum of 24 students but must not exceed 28. Within the total square footage of the room, 6 SF per student of horizontal laboratory countertop space (3 feet wide x 2 feet deep) shall be provided at student laboratory benches, and an additional 3 LF per student of horizontal laboratory countertop support space shall be provided for equipment and materials for investigations, activities, or student projects.

(C) Science classrooms. Science classrooms shall be provided at a ratio not to exceed 2:1 of science classrooms to science laboratories at the secondary level and must meet the requirements of subsection (h)(3) of this section. The science laboratories must be located in close proximity to the science classrooms they serve.

(D) Fume hoods.

(i) Each of the following shall have one built-in fume hood:

(I) at least one middle school prep room per grade level served in the school facility;

(II) high school level chemistry or Advanced Placement (AP) chemistry combination classroom/laboratory or laboratory; and

(III) prep room serving chemistry, AP chemistry, or integrated physics and chemistry (IPC) combination classroom/laboratory or laboratory.

(ii) A double-sided fume hood may be provided to satisfy chemistry or AP chemistry fume hood requirements.

(iii) The exhaust shall be vented to the outside, above the roof and away from air vents.

(E) Preparation/storage rooms. One preparation/storage room at a minimum 10 SF per student shall be provided adjacent to each combination science classroom/laboratory. One preparation/storage room at a minimum of 10 SF per student shall be provided per science classroom and be located adjacent to its partner science laboratory. Preparation/storage rooms may be combined, but the combination of more than one preparation/storage room shall not reduce the minimum square feet or quantity of built-in fume hoods required if they were not combined.

(F) Chemical storage room. If hazardous or vaporous chemicals are to be used in a science laboratory or combination science classroom/laboratory, a separate chemical storage room shall be provided. The chemical storage room shall be separate from, and shall not be combined as part of, a preparation room or an equipment storage room; however, the chemical storage room may be located so that access is through a preparation room or equipment storage room. The chemical storage room shall be secure to prevent access to chemicals by students or non-authorized adults. One chemical storage room may be shared among multiple laboratories or classrooms/laboratories. Refer to National Fire Protection Association (NFPA), International Fire Code (IFC), and Occupational Safety and Health Administration (OSHA) for additional requirements.

(G) Eye/face wash. A built-in eye/face wash that can wash both eyes simultaneously shall be provided in each room serving Grades 5-12 where hazardous chemicals or eye irritants are used by instructors and/or students. The eye/face wash shall comply with the American National Standards Institute (ANSI) Standards for Shower

and Eyewash Equipment (Z358.1). The tepid water required by ANSI Z358.1 is not required to come from a heated source; however, school districts that commonly experience lengthy periods of extremely cold temperatures during the winter season shall consider a tepid water system with a heated source.

(H) Safety shower. A built-in safety shower shall be provided in each combination classroom/laboratory, laboratory, or prep room where a built-in fume hood is required or voluntarily provided. Where a safety shower is required in both the laboratory and corresponding prep room, a safety shower may be provided in only the prep room to satisfy this requirement. The safety shower shall comply with the ANSI Standards for Shower and Eyewash Equipment (Z358.1). The tepid water required by ANSI Z358.1 is not required to come from a heated source; however, school districts that commonly experience lengthy periods of extremely cold temperatures during the winter season shall consider a tepid water system with a heated source.

(I) Exhaust fan and ventilation system. Refer to International Mechanical Code, ANSI, OSHA, and NFPA for project requirements.

(J) Emergency shut-off controls. If electricity, gas, and/or water are provided in student areas, emergency shut-off controls shall be provided for each in a location accessible to the instructor but not easily accessible to students. It shall not be located at any doorway leading to a corridor or hallway.

(K) Special education. Specialized classrooms shall be a minimum of 45 SF per student.

(h) Quantitative method of compliance for instructional facility space requirements. A school district board of trustees shall approve compliance with this method or the method of compliance described in subsection (i) of this section before the commencement of design development for a capital improvement project for an instructional facility.

(1) To satisfy this method of compliance, the capital improvement project shall meet the minimum aggregate square footage based on the campus's flexibility level as specified in paragraph (2) of this subsection, the SF per student as specified in paragraph (3) of this subsection, and the maximum instructional capacity of the campus included in the project's educational specifications. Cafeterias, gymnasiums, and library space may not be used to satisfy this method of compliance. The minimum aggregate square footage required may be comprised of the following:

(A) mathematics, English/language arts, and history/social studies classrooms;

(B) combination science classrooms/laboratories;

(C) science classrooms, if the separate science classroom and laboratory layout is used;

(D) special education classrooms;

(E) collaboration areas; and

(F) elective classrooms or laboratories under the following circumstances:

(i) if the elective program necessitates a SF per student in excess of the value specified in subsection (h)(3) of this section, a maximum of total square feet for the space shall be used that is equal to the value specified in (h)(3) of this section multiplied by the maximum number of students that shall be safely served in that classroom or laboratory at a time;

(ii) if the elective classroom or laboratory is used between 51-100% of the school day, at a factor of 1; and

(iii) if the elective classroom or laboratory is used between 0-50% percent of the school day, at a factor of .5.

(2) The level of flexibility of a facility must be selected by a school district in order to calculate the minimum aggregate square footage under paragraph (3) of this subsection.

(A) Flexibility Level 1 (L1). Single, fixed teacher presentation space; compact organization of spaces makes access to outdoor space limited and challenging; furniture is exclusively attached student desk/chair with an expectation of very infrequent rearrangement; minimal multipurpose functionality for walls with no capability of reconfiguration; teacher-centric digital instruction with partial access to mobile devices.

(B) Flexibility Level 2 (L2). Single, fixed teacher presentation space; compact organization of spaces makes access to outdoor space limited and challenging, but outdoor spaces may be visible from classrooms; furniture includes detached student desk/chair with an expectation of very infrequent rearrangement; moderate multipurpose functionality for walls with no capability of reconfiguration; teacher-centric digital instruction with moderate access to mobile devices.

(C) Flexibility Level 3 (L3). Multiple student/teacher presentation spaces; organization of spaces allows for proximal outdoor access that is visible from classrooms; flexible and mobile furniture that is easily rearranged; high use of multipurpose walls, including digital touchscreen and other functionalities; learner-centric digital instruction with high levels of access to a range of mobile devices.

(D) Flexibility Level 4 (L4). Multiple student/teacher presentation spaces that are likely mobile; organization of spaces allows for direct outdoor access that is visible from classrooms; highly flexible and mobile furniture that is easily rearranged by students independently or collectively; maximized inclusion of multipurpose walls, including digital capabilities and reconfiguration; learner-centric digital instruction with high levels of access to a range of mobile devices incorporating an "anytime/anywhere" instructional philosophy.

(3) The minimum aggregate square footage shall be determined based on the minimum square footage per student by campus type and the selected flexibility level approved under paragraph (2) of this subsection.

(A) Elementary schools (prekindergarten-Grade 5):

- (i) L1 36 SF per pupil (pp);
- (ii) L2 36 SF pp;
- (iii) L3 42 SF pp; and
- (iv) L4 42 SF pp.

(B) Middle schools (Grades 6-8):

- (i) L1 32 SF pp;
- (ii) L2 32 SF pp;
- (iii) L3 36 SF pp; and
- (iv) L4 36 SF pp.

(C) High schools (Grades 9-12):

- (i) L1 32 SF pp;
- (ii) L2 32 SF pp;
- (iii) L3 36 SF pp; and
- (iv) L4 36 SF pp.

(i) Qualitative method of compliance for instructional facility space standards. A school district board of trustees shall approve compliance with this method or the method of compliance described in subsection (h) of this section before the commencement of design development for a capital improvement project for an instructional facility. A school district may use the qualitative method of compliance for a capital improvement project only if the board of trustees has prior documented approval of one or more instructional or operational practices for the proposed project that distributes or manages student capacity in an innovative or non-traditional manner. Prior to approving the qualitative method of compliance, all instructional and operational practices applicable to the proposed project must have been documented and approved by the school district board of trustees to demonstrate compliance with the requirements in this subsection.

(1) To satisfy this method of compliance, the project shall meet the minimum total square footage based on the campus's flexibility level as specified in subsection (h)(2) of this section, the SF per student as specified in subsection (h)(3) of this section, and the adjusted maximum instructional capacity of the campus. The minimum aggregate square footage required may be comprised of the following:

(A) mathematics, English/language arts, and history/social studies classrooms;

(B) combination science classrooms/laboratories;

(C) science classrooms, if the separate science classroom and laboratory layout is used;

(D) special education classrooms;

(E) collaboration areas; and

(F) elective classrooms or laboratories under the following circumstances:

(i) if the elective program necessitates a SF per student in excess of the value specified in subsection (h)(3) of this section, a maximum of total square feet for the space shall be used that is equal to the value specified in subsection (h)(3) of this section multiplied by the maximum number of students that shall be safely served in that classroom or laboratory at a time;

(ii) if the elective classroom or laboratory is used between 51-100% of the school day, at a factor of 1; and

(iii) if the elective classroom or laboratory is used between 0-50% of the school day, at a factor of .5.

(2) Gymnasiums may not be used to satisfy this method of compliance. Cafeterias and library space may be used to satisfy this method of compliance and shall be treated like an elective space under paragraph (1)(F) of this subsection.

(j) Construction quality standards.

(1) Construction code requirements. A capital improvement project for a school facility must reasonably comply with the following construction code requirements.

(A) Projects located outside of a municipal jurisdiction in the unincorporated area of a county must reasonably comply with the following requirements.

(i) Where projects are located in a county that does not have an adopted general building code, projects must reasonably comply with the International Building Code and the Existing Building Code, as published by the International Code Council, as they existed on May 1, 2003. Where projects are located in a county that has an adopted general building code, projects must reasonably comply with the adopted general building code and any chapters that were not

adopted or removed entirely by amendment from the adopted model building code. Where a project is located in an area that is designated as a catastrophe area according to the Texas Department of Insurance, a project must also reasonably comply with any applicable amendments to the building code that have been adopted by the Texas Department of Insurance in accordance with Texas Insurance Code, Chapter 2210.

(ii) Where projects are located in a county that does not have an adopted mechanical code, projects must reasonably comply with the International Mechanical Code, as published by the International Code Council, as it existed on the same date that the applicable International Building Code was published. Where projects are located in a county that has an adopted mechanical code, projects must reasonably comply with the adopted mechanical code.

(iii) Where projects are located in a county that does not have an adopted fire code, projects must reasonably comply with the NFPA 101 Life Safety Code and NFPA 1 Fire Code standards adopted by the State Fire Marshal in accordance with TGC, §417.008, and in accordance with 28 TAC §34.301 (relating to Purpose). Where projects are located in a county that has an adopted fire code, projects must reasonably comply with the adopted fire code.

(iv) Where projects are located in a county that does not have an adopted plumbing code, projects must reasonably comply with the International Plumbing Code and referenced International Fuel Gas Code, as published by the International Code Council, as adopted by the Texas Board of Plumbing Examiners as established in 22 TAC §367.2(a) (relating to Code Requirements) in accordance with TOC, Chapter 1301. Where projects are located in a county that has an adopted plumbing code, projects must reasonably comply with the adopted plumbing code.

(v) Where projects are located in a county that does not have an adopted electric code, projects must reasonably comply with the National Electric Code, as published by the NFPA, as adopted by the Texas Department of Licensing and Regulation in accordance with TOC, Chapter 1305. Where projects are located in a county that has an adopted electric code, projects must reasonably comply with the adopted electric code.

(vi) Projects must reasonably comply with the International Energy Conservation Code, as published by the International Code Council, as adopted by the State Energy Conservation Office of Texas in accordance with Texas Health and Safety Code, Chapter 388.

(vii) Projects must reasonably comply with the International Swimming Pool and Spa Code, as published by the International Code Council, as it existed on May 1, 2019.

(viii) Projects must reasonably comply with the industrialized housing and building rules as adopted by the Texas Commission of Licensing and Regulation in accordance with TOC, Chapter 1202.

(B) Projects located inside of a municipal jurisdiction must reasonably comply with the following requirements.

(i) Where projects are located in a municipality that does not have an adopted general building code, projects must reasonably comply with the International Building Code and the International Existing Building Code, as published by the International Code Council, as they existed on May 1, 2003, in accordance with Local Government Code, §214.216. Where projects are located in a municipality that has an adopted general building code, projects must reasonably comply with the adopted general building code. Where a project is located in an area that is designated as a catastrophe area according to the Texas Department of Insurance, a project must also comply with any applicable amendments to the building code that have been adopted by

the Texas Department of Insurance in accordance with Texas Insurance Code, Chapter 2210.

(ii) Where projects are located in a municipality that does not have an adopted mechanical code, projects must comply with the International Mechanical Code, as published by the International Code Council, as it existed on May 1, 2003. Where projects are located in a municipality that has an adopted mechanical code, projects must reasonably comply with the adopted mechanical code.

(iii) Where projects are located in a municipality that does not have an adopted fire code, projects must reasonably comply with the NFPA 101 Life Safety Code and NFPA 1 Fire Code standards adopted by the State Fire Marshal in accordance with TGC, §417.008, and in accordance with 28 TAC §34.301. Where projects are located in a municipality that has an adopted fire code, projects must reasonably comply with the adopted fire code.

(iv) Where projects are located in a municipality that does not have an adopted plumbing code, projects must reasonably comply with the International Plumbing Code and referenced International Fuel Gas Code, as published by the International Code Council, as adopted by the Texas Board of Plumbing Examiners as established in 22 TAC §367.2(a) in accordance with TOC, Chapter 1301. Where projects are located in a municipality that has an adopted plumbing code, projects must reasonably comply with the adopted plumbing code.

(v) Where projects are located in a municipality that does not have an adopted electric code, projects must reasonably comply with the National Electric Code, as published by the NFPA, as adopted by the Texas Department of Licensing and Regulation in accordance with TOC, Chapter 1305. Where projects are located in a municipality that has an adopted electric code, projects must reasonably comply with the adopted electric code.

(vi) Where projects are located in a municipality that does not have an adopted energy conservation code, projects must reasonably comply with the International Energy Conservation Code, as published by the International Code Council, as adopted by the State Energy Conservation Office of Texas in accordance with Texas Health and Safety Code, Chapter 388. Where projects are located in a municipality that has an adopted energy conservation code, projects must reasonably comply with the adopted energy conservation code.

(vii) Where projects are located in a municipality that does not have an adopted swimming pool code, projects must reasonably comply with the International Swimming Pool and Spa Code, as published by the International Code Council, as it existed on May 1, 2019. Where projects are located in a municipality that has an adopted swimming pool code, projects must reasonably comply with the adopted swimming pool code.

(viii) Projects must reasonably comply with the industrialized housing and building rules as adopted by the Texas Commission of Licensing and Regulation in accordance with TOC, Chapter 1202.

(2) Third-party code compliance requirements.

(A) A school district shall require the prime design professional of a capital improvement project to submit to the school district a report identifying any construction code requirements that the prime design professional believes, to the best of their knowledge after performing research, will not be enforced by a state or local authority having jurisdiction.

(B) A school district shall contract with a third-party code compliance officer to enforce any construction code requirement

identified by a prime design professional pursuant to subparagraph (A) of this paragraph as not enforced by a state or local authority having jurisdiction and shall adjust the scope of services provided by the third-party code compliance officer if an error is discovered in the prime design professional's report.

(C) A school district shall hire a third-party code compliance officer to have all of the duties and powers of a building official, as defined by the required construction codes and to the extent allowable by state law, to ensure compliance with any required construction code provisions identified as not enforced by a state or local jurisdiction with authority pursuant to subparagraphs (A) and (B) of this paragraph.

(D) In the manner specified by TGC, §2269.058, a school district shall procure the services of a third-party code compliance officer required by subsection (j) of this section as a professional service in accordance with the Texas Professional Services Procurement Act, as established in TGC, Chapter 2254.

(E) A third-party code compliance officer must not be a design professional responsible for the design of any portion of the project, anyone employed by a design professional responsible for the design of any portion of the project, a contractor responsible for constructing any portion of the project, or anyone employed by a contractor responsible for constructing any portion of the project. A third-party code compliance officer may be a peer reviewer that performs a peer review required for any storm shelters that are part of the project.

(F) A third-party code compliance officer must have a Certified Building Official designation from the International Code Council (ICC). A third-party code compliance officer must also have at least ten years of experience or equivalent experience as an architect, engineer, inspector, contractor or superintendent of construction, or any combination of these, at least five years of which have been supervisory experience.

(G) A plan review performed by or under the supervision of a third-party code compliance officer must be performed by a qualified design professional or an independent third party qualified to certify plans through the ICC for the appropriate building, mechanical, electrical, or plumbing trade. Plan reviews performed under the supervision of a third-party code compliance officer must be performed by a person with at least five years of experience as an engineer or an architect.

(H) The following shall apply to a storm shelter where a required construction code has a provision requiring a storm shelter for certain projects.

(i) For the purposes of determining if a storm shelter is required for a specific building area, a school district shall require a third-party code compliance officer to accept, as a modification of the code in lieu of meeting the requirement to provide a storm shelter for that specific area, any written justification submitted by the school district that purports that the intended use of the specific building area that would be served by a storm shelter is not used for educational purposes during normal school hours when attendance is mandatory.

(ii) Where a storm shelter is required for new construction, a school district shall require a third-party code compliance officer to allow the occupant load for storm shelter design to be 110% of maximum instructional capacity, as stated by the designated representative of the school district in writing, even if this is significantly less than the total occupant load used for other purposes such as fire egress.

(iii) Where a storm shelter is required for additions, a school district shall require a third-party code compliance officer to allow the occupant load for storm shelter design to be based on, prorati-

ing where only a portion of the school facility is considered, 110% of maximum instructional capacity, as stated by the designated representative of the school district in writing, even if this is significantly less than the total occupant load used for other purposes such as fire egress.

(iv) For the purposes of determining if a storm shelter can serve the occupants of a building that is located at a distance from the storm shelter that is greater than a code-required maximum distance, a school district shall require a third-party code compliance officer to accept, as a modification of the code in lieu of meeting the specific distance requirement, any written emergency operations plan submitted by the school district that purports to provide early notification to those occupants. School districts may use protections provided in TEC, §37.108, to protect sensitive information.

(v) For the purposes of determining if a storm shelter is required to be constructed at a school facility where applicable construction codes require a storm shelter and a modular building be installed as part of the project, a school district shall require a third-party code compliance officer to consider as new construction any modular building that is installed as part of the project, regardless of whether it is relocatable.

(3) Other requirements.

(A) A capital improvement project for a school facility subject to the standards in this section must comply with the 2010 Americans with Disabilities Act Standards for Accessible Design as well as the Texas Accessibility Standards of 2012.

(B) A school district shall notify a design professional in writing of any construction-related standard or expectation of the school district for the project that is not otherwise established or required by an applicable construction code as required in this subsection. Where a school district contracts with a design professional and that design professional subcontracts another design professional, the school district need only notify the design professional that has a contract with the school district.

(C) A school district shall consider as part of a capital improvement project the use of designs, methods, and materials that will reduce the potential for indoor air quality problems. A school district may use the voluntary indoor air quality guidelines adopted by the Texas Department of State Health Services under Texas Health and Safety Code, Chapter 385; the "Indoor Air Quality Tools for Schools" program administered by the U.S. Environmental Protection Agency; or some other updated state approved guidelines or standards for indoor air quality in response to communicable disease related public health issues.

(D) A school district shall consider as part of a capital improvement project the use of sustainable school designs. A sustainable design is a design that minimizes a facility's impact on the environment through energy and resource efficiency.

(k) Safety and security standards.

(1) Compliance requirements applicable to all instructional facilities campus-wide. A capital improvement project of a school district or an open-enrollment charter school must include campus-wide implementation of the following provisions.

(A) Communications infrastructure. In accordance with TEC, §37.108, a school district or an open-enrollment charter school shall:

(i) develop a multi-hazard plan that provides measures to ensure that school district communications technology and infrastructure are adequate to allow for communication during an emergency;

(ii) implement measures to ensure every classroom and portable classroom provides district employees, including substitute teachers, access to a telephone, cellular telephone, or other electronic communications device to allow immediate contact with district emergency services or emergency services agencies, law enforcement agencies, health departments, and fire departments; and

(iii) develop site plans and floor plans for a school facility in accordance with TEC, §37.108(f).

(B) Access control. A school district or an open-enrollment charter school shall develop a document that designates each exterior door of each instructional facility campus-wide as either primary, secondary, or non-designated entrances and shall ensure that the documented designation of all exterior doors becomes part of the long-range facility plan prior to commencement of construction of a capital improvement project.

(2) Additional standards based on the project construction budget. A school district shall approve a project construction budget for a capital improvement project at completion of the design development phase of the project and prior to commencement of the construction documents phase. The project construction budget approved by the school district shall determine how many of the additional safety and security standards established in paragraph (3) of this subsection are required for the project. A school district shall designate in writing which of the additional safety and security standards in paragraph (3) of this subsection have been approved by the school district board of trustees for a capital improvement project and shall provide to the prime design professional and each design professional of record written documentation of the approved safety and security standards for the proposed facility prior to commencement of the construction documents phase of a capital improvement project. The following standards shall apply to a capital improvement project for an instructional facility until all instructional facilities campus-wide fully comply with all of the additional safety and security standards specified in this subsection.

(A) If a project construction budget is \$1 million to \$5 million, the facility is required to comply with at least one additional safety and security standard specified in paragraph (3) of this subsection.

(B) If a project construction budget is \$5 million to \$10 million, the facility is required to comply with at least two additional safety and security standards specified in paragraph (3) of this subsection.

(C) If a project construction budget is over \$10 million, the facility is required to comply with all of the additional safety and security standards specified in paragraph (3) of this subsection.

(D) For a capital improvement project that includes new construction, the new construction of an instructional facility is required to comply with all three of the additional safety and security standards specified in paragraph (3) of this subsection.

(3) Additional safety and security standards applicable to all instructional facilities campus-wide. A school district or an open-enrollment charter school must include campus-wide implementation of the following standards in accordance with terms and requirements of paragraph (2) of this subsection.

(A) Exterior door numbering. All instructional facilities campus-wide, including portable, modular buildings, must include the addition of graphically represented alpha-numerical characters on both the interior and exterior of each exterior door location. The characters may be installed on the door, or on at least one door at locations

where more than one door leads from the exterior to the same room inside the facility, or on the wall immediately adjacent to or above the door location. Characters shall comply with the IFC, §505. The primary entrance of an instructional facility, as defined by subsection (a)(23)(A) of this section, shall always be the first in the entire sequence and is the only door location that does not require numbering. The numbering sequence shall be clockwise and may be sequenced for the entire campus or for each facility individually. The design professional of record shall coordinate with school district personnel and local emergency response personnel prior to incorporating exterior door numbering characters and locations into the contract documents for the facility or facilities specified to be included in a capital improvement project. The design professional of record shall coordinate this requirement with any and all accessibility requirements related to signage.

(B) Visitor management. All primary entrances of instructional facilities campus-wide must include the following:

(i) an unobstructed line of sight of approaching visitors through physical or digital means;

(ii) a physical barrier that prevents unassisted access to the facility by a visitor; and

(iii) a location for a visitor check-in and check-out process.

(C) Security cameras. All primary and secondary entrances of instructional facilities campus-wide must include a security camera.

(4) Exceptions to additional standards based on cost. A school district may opt out of the requirements specified in paragraph (2) of this subsection if:

(A) the facility is scheduled to, according to the long-range facilities plan, cease operations as an instructional facility within three years of the project; and

(B) the five-year long-range facility plan clearly states that, prior to the end date of the plan, the facility will be compliant with at least two additional safety and security standards specified in paragraph (2) of this subsection if ceasing operation does not occur or operation resumes. The long-range facility plan must specify which two additional safety and security standards will be implemented.

(5) Public disclosure process. A school district board of trustees or open-enrollment charter school governing body shall ensure information or documents collected, developed, or produced by the district as part of a capital improvement project are reviewed to ensure that any project-specific safety and security information is adjusted for disclosure if necessary to accommodate the requirement for a district to use protections provided in TEC, §37.108, which directs the school district to protect sensitive information, while also providing general information to the public indicating district compliance commitments made in accordance with this subsection.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 22, 2021.

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Cristina De La Fuente-Valadez
Director, Rulemaking
Texas Education Agency
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Proposal publication date: April 9, 2021
For further information, please call: (512) 475-1497



TITLE 34. PUBLIC FINANCE

PART 3. TEACHER RETIREMENT SYSTEM OF TEXAS

CHAPTER 31. EMPLOYMENT AFTER RETIREMENT

The Teacher Retirement System of Texas (TRS) adopts the repeal of §§31.1, 31.2, and 31.3 under Subchapter A (relating to General Provisions) of Chapter 31 in Part 3 of Title 34 of the Texas Administrative Code; §§31.11, 31.12, 31.13, 31.14, and 31.15 under Subchapter B (relating to Employment After Service Retirement) of Chapter 31; and §§31.31, 31.32, 31.33, 31.34, 31.35, 31.36, 31.37, and 31.41 of Subchapter C (relating to Employment After Disability Retirement) of Chapter 31. These rules are repealed without changes to the repealed text as proposed in the August 13, 2021 issue of the *Texas Register* (46 TexReg 4975). These rules will not be republished. These repeals are adopted in conjunction with the adopted new rules under Chapter 31 published elsewhere in this issue of the *Texas Register*.

REASONED JUSTIFICATION

TRS adopts the repeal of its existing sixteen rules under Chapter 31 as part of a complete restructuring and revision of that chapter in order to implement new legislation passed by the 87th Texas Legislature. For the same purpose, TRS is also adopting eighteen new rules under Chapter 31 elsewhere in this issue of the *Texas Register*. These new rules effectively incorporate most of the substantive requirements of these repealed rules but make formatting and stylistic changes to those provisions for readability purposes. In some cases, the new rules also remove obsolete requirements or make other substantive changes for policy or legislative reasons. A complete description of these changes can be found in the preamble to the new Chapter 31 rules.

TRS has determined that the repealed rules shall become effective on November 1, 2021.

COMMENTS

No comments on the proposed repeal were received.

SUBCHAPTER A. GENERAL PROVISIONS

34 TAC §§31.1 - 31.3

STATUTORY AUTHORITY

TRS adopts the repeal of these rules under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; and Government Code §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The repeal of these rules affects the following statutes: Government Code §824.601, which relates to loss of monthly benefits; Government Code § 824.602, which relates to exceptions; and Government Code §825.4092, relating to employer contributions for employed retirees.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 27, 2021.

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Don Green
Chief Financial Officer
Teacher Retirement System of Texas
Effective date: November 1, 2021
Proposal publication date: August 13, 2021
For further information, please call: (512) 542-6560



SUBCHAPTER B. EMPLOYMENT AFTER SERVICE RETIREMENT

34 TAC §§31.11 - 31.15

STATUTORY AUTHORITY

TRS adopts the repeal of these rules under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; and Government Code §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The repealed rules affect the following statutes: Government Code §824.601, which relates to loss of monthly benefits; and Government Code § 824.602, which relates to exceptions.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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For further information, please call: (512) 542-6560



SUBCHAPTER C. EMPLOYMENT AFTER DISABILITY RETIREMENT

34 TAC §§31.1 - 31.37, 31.41

STATUTORY AUTHORITY

TRS adopts the repeal of these rules under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; and Government Code §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The repealed rules affect the following statutes: Government Code §824.310, relating to purpose of disability benefit; limit on supplemental income; Government Code §824.601, which relates to loss of monthly benefits; and Government Code §824.602, which relates to exceptions.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6560



CHAPTER 31. EMPLOYMENT AFTER RETIREMENT

The Teacher Retirement System of Texas (TRS) adopts new §§31.1, 31.2, 31.3, 31.4, 31.5, and 31.6 under new Subchapter A (relating to General Provisions and Procedures) of Chapter 31 in Part 3 of Title 34 of the Texas Administrative Code; new §§31.11, 31.12, 31.13, 31.14, 31.15, 31.16, 31.17, 31.18, and 31.19 under new Subchapter B (relating to Employment After Retirement Exceptions) of Chapter 31 in Part 3 of Title 34 of the Texas Administrative Code; and new §§31.31, 31.32, and 31.33 of new Subchapter C (relating to Disability Retiree Compensation Limits) of Chapter 31 in Part 3 of Title 34 of the Texas Administrative Code. These new rules are adopted without changes to the text as proposed in the August 13, 2021, issue of the *Texas Register* (46 TexReg 4976). These rules will not be republished. These new rules are adopted in conjunction with the repeal of all existing rules under current Chapter 31 as published elsewhere in this issue of the *Texas Register*.

REASONED JUSTIFICATION

TRS adopts these eighteen new rules relating to employment after retirement (EAR) for TRS retirees in order to implement new legislation passed by the 87th Texas Legislature. Specifically, these new rules are necessary to implement House Bill 1585 (HB 1585), Senate Bill 202 (SB 202), Senate Bill 288 (SB 288), and Senate Bill 1356 (SB 1356). Each of these bills made substantial changes to EAR for TRS retirees.

HB 1585 amended, most relevantly, Government Code §824.601 to make two key changes to TRS's EAR requirements. First, HB 1585 amended Government Code §824.601(b-1) to change the current "safe harbor" retirement date for service retirees who are exempt from EAR restrictions from January 1,

2011 to January 1, 2021. Second, HB 1585 amended Government Code §824.601 by creating a "three strikes" process under new subsection (b-3) that must be completed before a service retiree forfeits the retiree's full annuity for a month based on that retiree's employment with TRS-covered employers during that month. The "three strikes" consist of a series of warnings and an alternate "dollar-for-dollar" payment option that TRS must provide a service retiree before the retiree may be subject to total forfeiture of the retiree's annuity.

SB 202 amended Government Code §825.4092 and prohibits employers from directly or indirectly passing on the cost of either the pension or health benefit surcharge to retirees through payroll deductions, fees, or any other means designed to recover the cost.

SB 288 created new Government Code §824.6021 and amended Government Code §825.4092. These changes created a new EAR and surcharge exception for certain service retirees who are employed in positions dedicated to mitigating learning loss caused by the COVID-19 pandemic. The positions must be in addition to normal staffing levels, funded by specific federal relief funds, and end no later than December 31, 2024. This exception does not apply to disability retirees or retirees employed with institution of higher education.

Lastly, SB 1356 amended, most relevantly, Government Code §824.602 to create a new exception to TRS's EAR requirements. Specifically, under new Education Code §33.913, SB 1356 established a new method for nonprofit organizations to establish tutoring programs in cooperation with public schools. The amendment to Government Code §824.602 provides that TRS retirees may be employed in these programs up to full-time during a month without forfeiting their annuity for that month. These retirees remain subject to employer surcharges.

In addition to implementing legislation, the new rules also make two key substantive changes to TRS's EAR requirements outside of the changes required by new legislation.

First, the new rules change TRS's existing standard for one-half time employment from the current variable monthly limit equal to four clock hours per workday in a given calendar month to a uniform monthly limit of 92 hours per month regardless of the number of workdays in that month or 11 days if the retiree combines one-half time and substitute employment in that month. This new uniform limit will simplify EAR requirements for retirees and reporting employers, and the change is retiree-friendly because in no case would it reduce the hours or days available for a retiree to work on a one-half time or less basis during a month. If ultimately adopted, the new limit would not only apply for purposes of EAR, but it would also apply to employer surcharges. This application does mean that, in certain instances, TRS could possibly not receive surcharges that it currently does based on a retiree's employment during a month, but TRS's actuary of record, Gabriel, Roeder, Smith & Company (GRS), determined the change would not have a material negative impact on the pension fund.

Second, the new rules expressly expand the definition of "substitute" for the purposes of EAR to include an employee who, on a temporary basis, monitors an in-person class while the classroom teacher temporarily instructs the class virtually. This is a novel employment arrangement that TRS has encountered during the COVID-19 public health emergency, and, based on an interpretation of its current rule, TRS has permitted this arrangement to qualify as substitute employment for the purposes of

EAR. This change to the rule codifies TRS's current interpretation of its substitute rule and places clear parameters upon when it may be used by school districts and retirees.

The new rules also make several additional minor changes necessary to ensure that the EAR rules conform with current TRS practice and nomenclature, and the new rules incorporate many existing provisions from the EAR rules that are repealed elsewhere in this issue of the *Texas Register*. TRS has included a detailed, rule-by-rule summary of changes below in its "Section-by-Section Summary."

Lastly, TRS has determined that the new rules shall become effective on November 1, 2021.

SECTION-BY-SECTION SUMMARY

New §31.1 (relating to Definitions) defines several terms for use throughout Chapter 31. The new rule incorporates existing definitions from current §31.1 and also adds several new definitions, such as for the terms "disability retiree," "service retiree," and "employment," to simplify and clarify rule language throughout the chapter.

New §31.2 (relating to Monthly Certified Statement) largely incorporates the existing provisions of current §31.2 with some non-substantive changes for style and clarity purposes. New §31.2 also adds provisions relating to how employers can report retirees working under EAR exceptions and makes other minor changes to conform to the rule's requirements with how employer reporting works under TRS's current reporting system.

New §31.3 (relating to Return-to-Work Employer Pension Surcharge) largely incorporates the existing provisions of current §31.41 with some nonsubstantive changes for style and clarity purposes. In addition, new §31.3 adds provisions relating to the surcharge pass-through prohibition created by SB 202 and the new surcharge exception for certain federally-funded COVID-19 positions created by SB 288. Lastly, new §31.3 provides that a 92-hour uniform standard for one-half time employment (or the combination standards for one-half time employment under new §31.19) shall be used to determine when employer surcharges are due.

New §31.4 (relating to Employment Resulting in Forfeiture of Retirement Annuity) incorporates provisions from current §31.11 and §31.31. New §31.4 also adds provisions to clarify the consequences for exceeding the limits on EAR for service retirees with an effective date of retirement on or before January 1, 2021; service retirees with an effective date of retirement after January 1, 2021; and disability retirees regardless of effective of retirement.

New §31.5 (relating to Notice and Forfeiture Requirements for Certain Service Retirees) implements the "three strikes" process from HB 1585. New §31.5 describes how TRS shall implement the three strikes process; how late adjustments to EAR reporting and retiree appeals will be incorporated into the process; and how TRS shall determine the date of issuance for a warning under the three strikes process.

New §31.6 (relating to Second EAR Warning Payments) implements the "dollar-for-dollar" payment option from the new "three-strikes" process. New §31.6 describes what compensation shall be used to determine the amount of the payment due under this requirement and how employers may adjust that compensation amount when a correction is needed. New §31.6 also provides that, by default, TRS will assume that a retiree who is subject to a second EAR warning must repay to TRS the lesser of either the

total monthly annuity payments that the retiree received for the relevant months or the total compensation earned for all employment with TRS-covered employers for that month. New §31.6 also provides that a retiree may elect to pay TRS the greater of these two amounts if the retiree wishes to do so.

New §31.11 (relating to Exceptions to Forfeiture of Retirement Annuity) primarily incorporates provisions from current §31.3 and §31.12 but clarifies that EAR exceptions only apply for service retirees with a retirement date after January 1, 2021.

New §31.12 (relating to Substitute Service) primarily incorporates provisions from current §§31.1, 31.13, and 31.32. New §31.12 also extends the definition of "substitute" to include an employee monitoring an in-person class on a temporary basis while the classroom teacher is temporarily instructing the class virtually. In addition, new §31.12 also clarifies how the 90-day limit for disability retirees who work as substitutes interacts with the new tutor exception provided by SB 1356.

New §31.13 (relating to One-half Time Employment) largely incorporates provisions from current §31.14 and §31.33. In addition, new §31.13 provides for the new 92-hour uniform standard for determining whether a retiree has worked one-half time or less during a month. New §31.13 also clarifies how the 90-day limit for disability retirees who work one-half time or less interacts with the new tutor exception provided by SB 1356.

New §31.14 (relating to Full-time Employment after 12 Consecutive Month Break in Service) largely incorporates provisions from current §31.15. In addition, new §31.15 clarifies that employment under either of the new EAR exceptions (the tutor exception or federally-funded COVID-19 position exception) counts as employment with a TRS-covered employer for the purposes of determining whether the retiree has had a 12 full, calendar month break in service after retirement.

New §31.15 (relating to Tutors under Education Code §33.913) implements the tutor exception to EAR created by SB 1356. In addition, new §31.15 clarifies that employment under the tutor exception count is subject to the general 90-day per school year limit for disability retirees who return to work for a TRS-covered employer.

New §31.16 (relating to Federally-Funded COVID-19 Personnel) implements the new federally-funded COVID-19 position exception provided by SB 288. New §31.16 also clarifies that, for the purposes of EAR, a position will be considered to end by December 31, 2024 if the position no longer exists after that date or if the position is no longer funded by federal funds after that date.

New §31.17 (relating to Employment Up to Three Months on a One-time Trial Basis) primarily reincorporates the provisions of current §31.34 with only minor conforming changes.

New §31.18 (relating to Combining EAR Exceptions) incorporates provisions from existing §§31.13, 31.14, 31.32, and 31.33 regarding how one-half time employment and substitute employment combine for the purposes of EAR. In addition, new §31.18 provides for how the new tutor exception and federally-funded COVID-19 position exception combine with the existing EAR exceptions. Specifically, the rule clarifies that the federally-funded COVID-19 position exception shall be accounted for separately from other EAR exceptions and shall not affect employment under other EAR exceptions. More than one-half time employment under the tutor exception, however, may not be combined with employment under any other exception during a month unless all of the retiree's employment during that month qualifies as sub-

stitute employment or the retiree qualifies for the twelve-month break-in-service exception. If a retiree works one-half time or less under the tutor exception during a month, however, the retiree may combine that employment during a month just as a retiree could combine any other one-half time employment during a month. Lastly, new §31.18 provides for how TRS shall consider employment in a single position that qualifies for more than one EAR exception, most notably providing that a position that qualifies for the federally-funded COVID-19 position exception shall only be subject to the requirements and limits of that exception.

New §31.19 (relating to Combining EAR Exceptions and Employer Surcharges) incorporates existing provisions from current §31.41. New §31.19 provides for how TRS shall consider a retiree's employment during a month if the retiree combines employment under more than one EAR exception. The combination requirements largely mirror the combination limits under new §31.18 for the purpose of determining whether a retiree is subject to EAR forfeiture requirements except that, for the purposes of employer surcharges, employment more than one-half time under the tutor exception or under the twelve-month break-in-service exception is subject to employer surcharges.

New §31.31 (relating to Disability Retiree Report of Excess Compensation) primarily reincorporates the provisions of current §31.35 with only minor conforming changes.

New §31.32 (relating to Forfeiture of Disability Retirement Annuity Payments Due to Excess Compensation) primarily reincorporates the provisions of current §31.36 with only minor conforming changes.

New §31.33 (relating to Applicability of Excess Compensation Provisions to Employment in Texas Public Educational Institutions) primarily reincorporates the provisions of current §31.37 with only minor conforming changes.

COMMENTS

No comments on the proposed new rules were received.

SUBCHAPTER A. GENERAL PROVISIONS AND PROCEDURES

34 TAC §§31.1 - 31.6

STATUTORY AUTHORITY

The new rules are adopted under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; Government Code §825.4092, which relates to employer contributions for employed retirees; and Government Code §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The new rules affect the following statutes: Government Code §824.601, which relates to loss of monthly benefits; Government Code § 824.602, which relates to exceptions; Government Code §824.6021, relating to temporary exception to mitigate learning loss attributable to COVID-19 pandemic, as enacted by SB 288 to be effective on September 1, 2021; and Government Code §825.4092, relating to employer contributions for employed retirees.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6560



SUBCHAPTER B. EMPLOYMENT AFTER RETIREMENT EXCEPTIONS

34 TAC §§31.11 - 31.19

STATUTORY AUTHORITY

The new rules are adopted under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; Government Code §825.4092, which relates to employer contributions for employed retirees; and Government Code §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The new rules affect the following statutes: Government Code §824.601, which relates to loss of monthly benefits; Government Code § 824.602, which relates to exceptions; Government Code §824.6021, relating to temporary exception to mitigate learning loss attributable to COVID-19 pandemic, as enacted by SB 288 to be effective on September 1, 2021; and Government Code §825.4092, relating to employer contributions for employed retirees.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

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For further information, please call: (512) 542-6560



SUBCHAPTER C. DISABILITY RETIREE COMPENSATION LIMITS

34 TAC §§31.31 - 31.33

STATUTORY AUTHORITY

The new rules are adopted under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; and Government Code §825.102, which

authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The new rules affect the following statutes: Government Code §824.310, relating to purpose of disability benefit; limit on supplemental income; Government Code §824.601, which relates to loss of monthly benefits; and Government Code § 824.602, which relates to exceptions.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

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CHAPTER 41. HEALTH CARE AND INSURANCE PROGRAMS

SUBCHAPTER A. RETIREE HEALTH CARE BENEFITS (TRS-CARE)

34 TAC §41.4

The Teacher Retirement System of Texas (TRS) adopts amendments to §41.4, relating to Employer Health Benefit Surcharge, under Subchapter A (relating to Retiree Health Care Benefits (TRS-CARE)) of Chapter 41 in Part 3 of Title 34 of the Texas Administrative Code. These amendments are adopted without changes to the proposed text as published in the August 13, 2021, issue of the *Texas Register* (46 TexReg 4986). The amended rule will not be republished. Amended §41.4 is adopted in conjunction with the repealed rules and adopted new rules under Chapter 31 (relating to Employment After Retirement) in Part 3 of Title 34 of the Texas Administrative Code. These adopted new rules and repeals are published elsewhere in this issue of the *Texas Register*.

REASONED JUSTIFICATION

TRS adopts amended §41.4 (relating to Employer Health Benefit Surcharge) to implement new legislation passed by the 87th Texas Legislature. Specifically, the amendments to §41.4 are necessary to implement Senate Bill 202 (SB 202) and Senate Bill 288 (SB 288).

SB 202 amended Government Code §825.4092 and prohibits employers from directly or indirectly passing on the cost of either the pension or health benefit surcharge to retirees through payroll deductions, fees, or any other means designed to recover the cost.

SB 288 created new Government Code §824.6021 and amended Government Code §825.4092. These changes created a new employment after retirement and surcharge exception for certain service retirees who are employed in

positions dedicated to mitigating learning loss caused by the COVID-19 pandemic. Importantly, SB 288 amended Section 825.4092 to not only exempt the employment of retirees from pension surcharge under Section 825.4092, but also the health benefit surcharge under that same section.

In addition, TRS proposes to amend §41.4 to conform with TRS's new §31.3 and §31.19 (relating to Return-to-Work Employer Pension Surcharge and Combining EAR Exceptions and Employer Surcharges, respectively) that are published elsewhere in this edition of the *Texas Register*. In these new rules, TRS established a new standard for determining whether a retiree is employed one-half time or less for the purposes of when the pension surcharge is due and also establishes what combinations of employment after retirement exceptions under Government Code §§824.601, 824.602, and 824.6021 can trigger the pension surcharge requirement for employers of TRS retirees. Because TRS has historically ensured that the employment standards applicable to the pension surcharge also applied to the health benefit surcharge, TRS is amending §41.4 to ensure it remains consistent with the corresponding rules under Chapter 31.

Lastly, TRS has made minor or nonsubstantive changes to §41.4 in order for the language to comply with current TRS practices or nomenclature.

TRS has determined that amended §41.4 shall become effective on November 1, 2021.

COMMENTS

No comments on the proposed amendments were received.

STATUTORY AUTHORITY

Amended §41.4 is adopted under the authority of Government Code §824.604, which provides that board of trustees may adopt rules to administer laws under Subchapter G of Chapter 824 of the Government Code; Government Code §825.4092, which relates to employer contributions for employed retirees; and Government Code §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

Amended §41.4 affects the following statutes: Government Code §824.6021, relating to temporary exception to mitigate learning loss attributable to COVID-19 pandemic, as enacted by SB 288 to be effective on September 1, 2021; and Government Code §825.4092, relating to employer contributions for employed retirees.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6560



34 TAC §41.16

The Board of Trustees of the Teacher Retirement System of Texas (TRS) adopts new §41.16, relating to One-Time Reenrollment Opportunity, of Subchapter A, Chapter 41, in Title 34, Part 3, of the Texas Administrative Code without changes to the proposed text as originally published in the August 13, 2021, issue of the *Texas Register* (46 TexReg 4988). The rule will not be republished.

REASONED JUSTIFICATION

TRS adopts new §41.16 to administer and implement new §1575.161(b) and (c) of the Insurance Code, which was introduced by House Bill 2022, 87th Texas Legislature, Regular Session, 2021. New §1575.161(b) of the Insurance Code mandates that the Board of Trustees create rules to provide a one-time opportunity to reenroll in a health benefit plan offered under TRS-Care for an otherwise eligible retiree. New §1575.161(c) of the Insurance Code provides that §1575.161(b) and (c) expire September 1, 2024.

New §41.16 restates the eligibility requirements of new Subsection 1575.161(b) of the Insurance Code; defines "eligible to enroll in Medicare"; addresses dependents; provides reenrollment will take effect on the first day of the month following the month in which TRS receives the written request; and provides that the new rule will expire September 1, 2024 unless extended by legislative action.

COMMENTS

No comments on the proposed adoption of new rule were received.

STATUTORY AUTHORITY

New §41.16 is adopted under the authority of Chapter 1575, Insurance Code, which establishes the Texas Public School Employees Group Benefits Program (TRS-CARE), §1575.052, which allows the trustee to adopt rules, plans, procedures, and orders reasonably necessary to implement Chapter 1575; Section 2 of House Bill 2022, 87th Texas Legislature, Regular Session, 2021, which requires the Teacher Retirement System of Texas to adopt rules necessary to implement §1575.161(b), Insurance Code; and Chapter 825, Texas Government Code, which governs the administration of TRS, §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The adopted new §41.16 affects §1575.161, Insurance Code, concerning Enrollment Periods.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 27, 2021.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6292

SUBCHAPTER C. TEXAS SCHOOL EMPLOYEES GROUP HEALTH (TRS-ACTIVECARE)

34 TAC §§41.30, 41.34, 41.36, 41.37, 41.45

The Board of Trustees of the Teacher Retirement System of Texas (TRS) adopts amendments to the following sections of Subchapter C, Chapter 41, in Title 34, Part 3, of the Texas Administrative Code without changes to the proposed text as originally published in the August 13, 2021, issue of the *Texas Register* (46 TexReg 4990): §41.30 (relating to participation in the health benefits program under the Texas School Employees Uniform Group Health Coverage Act by school districts, other educational districts, charter schools, and regional education service centers); §41.34 (relating to eligibility for coverage under the Texas School Uniform Group Health Coverage Program); §41.36 (relating to enrollment periods); §41.37 (relating to effective date of coverage); and §41.45 (relating to required information from school districts with more than 1,000 employees). The rules will not be republished.

REASONED JUSTIFICATION

The Board of Trustees of TRS adopts the amendments to §§41.30, 41.34, 41.36, 41.37, and 41.45 to administer and implement amendments to Chapter 1579 (TRS-ActiveCare) of the Insurance Code, introduced by Senate Bill (S.B.) 1444, 87th Legislature, Regular Session, 2021.

S.B. 1444 amended Insurance Code, Chapter 1579, by adding new §1579.1045 relating to alternative group health coverage prohibition and new §1579.155 relating to program participation election. New §1579.1045 of the Insurance Code clarifies that participating entities are prohibited from offering alternative group health coverage. New §1579.155 of the Insurance Code allows, effective on September 1, 2022, entities to elect to participate or discontinue participation in TRS-ActiveCare by providing written notice to TRS not later than December 31 of the year preceding the first day of the plan year in which the election will be effective; prohibits a participating entity that elects to discontinue participation in TRS-ActiveCare from electing to participate in the TRS-ActiveCare again until the fifth anniversary after the effective date of the entity's election to discontinue participation; and prohibits an entity that elects to participate in TRS-ActiveCare from discontinuing the entity's participation until the fifth anniversary of the effective date of the entity's election to participate.

Adopted amendments to §41.30 add a subsection to address to whom the section is applicable; clarify that an entity's mandatory notice of election to join TRS-ActiveCare will not be considered complete without the submission of the information required under §41.45; establish the timing and process for joining and leaving TRS-ActiveCare; codify the prohibition on offering alternative group health coverage; and identify remedies for failure to comply with the statutes and rules.

Adopted amendments to §41.34 provide that individuals receiving COBRA continuation coverage under an alternative group health plan being offered concurrently with TRS-ActiveCare will not receive continuing COBRA coverage under TRS-ActiveCare if the participating entity terminates the alternative plan or is terminated from TRS-ActiveCare for violating §1579.1045 of the Insurance Code.

Adopted amendments to §41.36 modify the initial employee enrollment period for employees of a new participating entity in order to be consistent with the new language in §41.30.

Adopted amendments to §41.37 modify the effective date for employee coverage in order to be consistent with the new language in §41.30.

Adopted amendments to §41.45 make the submission of required information applicable to all entities, not just to School Districts with More than 1,000 Employees; clarify that this information is required to be provided at the same time as the notice of election and that failure to provide it will result in an incomplete election; and add additional information requirements.

COMMENTS

No comments on the proposed adoption of the amendments were received.

STATUTORY AUTHORITY

The amendments are adopted under the authority of Insurance Code §1579.052, which allows the trustee to adopt rules relating to the program as considered necessary by the trustee and requires the trustee to take the actions it considers necessary to devise, implement, and administer the program; Insurance Code §1579.155(d), which requires the trustee to issue rules necessary to administer §1579.155; and Chapter 825, Texas Government Code, which governs the administration of TRS, §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The adopted amendments affect Chapter 1579, Insurance Code, which establishes the Texas School Employees Uniform Group Health Coverage (TRS-ActiveCare), §1579.1045 relating to alternative group health coverage prohibition and §1579.155 relating to program participation: election.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6292



34 TAC §41.35

The Board of Trustees of the Teacher Retirement System of Texas (TRS) adopts an amendment to §41.35, relating to Coverage Plans, of Subchapter C, Chapter 41, in Title 34, Part 3, of the Texas Administrative Code without changes to the proposed text as originally published in the August 13, 2021, issue of the *Texas Register* (46 TexReg 4995). The rule will not be republished.

REASONED JUSTIFICATION

TRS adopts the amendment to §41.35, which adds new subsection (e). The adopted amendment clarifies that TRS has the flexibility to set rates and premiums for TRS-ActiveCare plans that would make them more competitive in the market. The adopted amendment adding subsection (e) provides that TRS may determine different rates and premiums applicable to participating entities or potential participating entities based on certain risks, regional factors, and other underwriting considerations.

COMMENTS

No comments on the proposed adoption of the amendment were received.

STATUTORY AUTHORITY

Amended §41.35 is adopted under the authority of Insurance Code §1579.052, which allows the trustee to adopt rules relating to the program as considered necessary by the trustee and requires the trustee to take the actions it considers necessary to devise, implement, and administer the program; and Chapter 825, Texas Government Code, which governs the administration of TRS, §825.102, which authorizes the board of trustees to adopt rules for the transaction of the business of the board.

CROSS-REFERENCE TO STATUTE

The adopted amendment to §41.35 affects Chapter 1579, Insurance Code, which establishes the Texas School Employees Uniform Group Health Coverage (TRS-ActiveCare), §1579.101, which requires the trustee to establish plans of group coverage for employees participating in the program and their dependents; provides tiers of coverage; defines the requirements of each coverage plan and tier of coverage; and provides comparable coverage plans of each tier of coverage.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6292



CHAPTER 43. CONTESTED CASES

34 TAC §43.1, §43.45

The Teacher Retirement System of Texas (TRS) adopts amendments to 34 TAC §43.1, relating to administrative review of individual requests and 34 TAC §43.45, relating to proposals for decision, exceptions, and appeals to the Board of Trustees without changes to the proposed text as originally published in the August 13, 2021, issue of the *Texas Register* (46 TexReg 4996). The rules will not be republished.

REASONED JUSTIFICATION

Chapter 43 addresses procedures for appeals of administrative decisions and contested cases relating to the TRS pension plan. TRS adopts amendments to §43.1 and §43.45 to implement

amendments to Government Code §825.521, by House Bill 1585, enacted by the 87th Texas Legislature, Regular Session, which requires TRS to modify the deadline for members or retirees to appeal a decision or determination by TRS staff to afford the member or retiree at least the same amount of time to file an appeal as TRS had to issue a decision in the appeal.

The amendments to Government Code §825.521 require TRS to make amendments to §43.1 and §43.5 to mirror the amendment to 34 Texas Administrative Code §43.5 necessitated by House Bill 2629 in 2019. House Bill 2629 created Section 825.521 and required the TRS Board of Trustees to adopt rules ensuring that the deadline for filing an appeal of a final administrative decision afford a member or retiree at least the same amount of time as TRS took to issue the final administrative decision. As required by the amendments to Government Code §825.521 made by House Bill 1585, the amendments to §43.1 and §43.45 expand the deadline structure from §43.5 to also apply to appeals of the decision of a department director and appeals of a decision in a contested case hearing rendered by the executive director following the issuance of a proposal for decision by an administrative law judge.

In the amended §43.1(c), a member or retiree must file their appeal of a department manager's decision by the later of either 45 days after the decision of a department manager is mailed or the number of days after the date the decision of the department manager is mailed equal to the number of days it took TRS to issue the decision of the department manager. Amended §43.1(d) provides that the number of days it took TRS to issue the decision of the department manager is calculated from the date TRS received a person's appeal to the date the decision of the department manager is mailed.

In amended §43.45(d), the member or retiree must file their appeal of the executive director's decision by the later of either 20 days after the date the decision of the executive director is served or the number of days after the date the decision of the executive director is served equal to the number of days it took the executive director to render the decision. Amended §43.45(f) provides the method for calculating that the number of days it took the executive director to render a decision. Amended §43.45(e) is a structural, nonsubstantive change to the rule required due to the changes to §43.45(d).

COMMENTS

No comments on the proposed adoption of the amendments were received.

STATUTORY AUTHORITY

The adopted amended rules are adopted under the authority of Government Code §825.102, which authorizes the Board to adopt rules for eligibility for membership, the administration of the funds of the retirement system, and the transaction of business of the Board; Government Code §825.115(b), which authorizes the Board to adopt rules relating to the authority of the Board to make a final decision in a contested case or delegate its authority; and under Government Code §825.521, which provides that in adopting rules relating to appeals of a determination or decision of the retirement system by the system's staff, the board of trustees shall ensure that rules establishing deadlines for the filing of an appeal afford a member or retiree at least the same amount of time to file an appeal as the retirement system has to issue the retirement system's decision.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Don Green

Chief Financial Officer

Teacher Retirement System of Texas

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For further information, please call: (512) 542-6560

PART 9. TEXAS BOND REVIEW BOARD

CHAPTER 181. BOND REVIEW BOARD

SUBCHAPTER A. BOND REVIEW RULES

34 TAC §§181.1 - 181.3, 181.5, 181.10

The Texas Bond Review Board (BRB) adopts amendments to Texas Administrative Code Title 34, Part 9, Chapter 181, Subchapter A §181.1, concerning Definitions; §181.2, concerning Notice of Intention to Issue; §181.3, concerning Application for Board Approval of State Securities Issuance; §181.5, concerning Submission of Final Report; and §181.10, concerning State Debt Issuer Reports. The amendments to §§181.1, 181.2, and 181.10 are adopted without changes to the text as proposed in the August 6, 2021, issue of the *Texas Register* (46 TexReg 4832). These amended rules will not be republished. Section 181.3 and §181.5 are adopted with changes to the text as proposed in the August 6, 2021, issue of the *Texas Register* (46 TexReg 4832), and will be republished.

Reasoned Justification for the Adoption of the Amendments

The BRB proposes updates and clarifications to its administrative code rules in Texas Administrative Code Chapter 181, specifically allowing for the electronic submission of non-exempt state debt application materials, state debt final reports, and state debt issuer semi-annual reports. Adopting these changes would give the Bond Review Board flexibility to require either hard copies or electronic copies of this information and would further agency efforts to improve its electronic communication practices and reduce paper usage.

Public Comment and BRB Responses

The public comment period on the adopted amendments opened on August 6, 2021, and extended through midnight on Sunday, September 5, 2021. No comments were received during this period.

The BRB held a public meeting to consider comments on the adopted rule changes on Tuesday, September 14, 2021, at 10:00 a.m. in Room 402 of the Clements Building at 300 West 15th Street, Austin, Texas 78701.

Concise Restatement of Statutory Authority

The amendments are adopted under Texas Government Code §1231.022(1), authorizing the BRB to adopt rules relating to ap-

plications for review, the review process, and reporting requirements. The BRB interprets this authority as allowing the agency to create and amend rules to facilitate the issuer application and review process.

No other statute, articles, or codes are affected by the adopted rule amendments.

§181.3. Application for Board Approval of State Securities Issuance.

(a) An officer or entity may not issue state securities unless the issuance has been approved by the Board or exempted under law, including by Board rule, from review by the Board. An officer or entity that has not been granted an exemption by statute or Board rule from review by the Board and that proposes to issue state securities shall apply for Board approval by filing an electronic copy, with an authorized signature, of the state debt application or one state debt application with original signatures and eleven copies with the Executive Director of the bond finance office. The Executive Director of the bond finance office shall forward copies of the application to each member of the Board and to the Office of the Attorney General.

(b) Applications must be filed with the bond finance office no later than ten business days prior to the regularly scheduled planning session. Applications filed after that date will be considered at the regular meeting only with the approval of the Chair or two or more members of the Board.

(c) An application for approval of a lease-purchase agreement to be deemed complete must include, but is not limited to:

(1) a completed lease purchase application form in the form required by the bond finance office;

(2) documentation that all necessary approvals of the issuance of the lease purchase have been obtained from the appropriate state boards or state agencies except:

(A) the approval of the state securities by the Attorney General; and

(B) environmental approvals and permits;

(3) draw schedule, if applicable;

(4) proposed amortization schedule;

(5) if the lease purchase is for the acquisition of energy conservation measures, which are subject to a guaranteed energy savings contract, a copy of the proposed contractual agreement, a copy of the third-party review, and any other documentation related to the guarantee; and

(6) Issuer Board resolution(s) authorizing the issuance of a lease purchase or other obligations adopted no earlier than one year prior to the date the lease-purchase application is submitted to the bond finance office.

(d) An application for all state securities other than lease-purchase agreements to be deemed complete must include, but is not limited to:

(1) a completed state debt application in the form required by the bond finance office;

(2) documentation that all necessary approvals of the issuance of the state securities or the project to be financed with the proceeds of the state securities have been obtained from the appropriate state boards or state agencies except:

(A) the approval of the state securities by the Attorney General; and

(B) environmental approvals and permits;

(3) if a blind pool financing, a copy of the demand survey or justification indicating reasonable expectation to lend proceeds;

(4) a substantially complete draft or summary of the proposed resolution, order, or ordinance providing for the issuance of the state security;

(5) most recent draft copy of the preliminary official statement, if such a statement is required for the issuance of the securities;

(6) proposed cash flow;

(7) proposed draw schedule, if applicable;

(8) proposed sources and uses statement;

(9) timetable of the financing;

(10) derivatives program summary, in the form required by the bond finance office, if applicable;

(11) Board memorandum for the proposed transaction prepared for issuer's governing board; and

(12) Issuer Board resolution(s) authorizing the issuance of bonds or other obligations adopted no earlier than one year prior to the date the state debt application is submitted to the bond finance office.

(e) Applications to authorize the issuance of a state security in the form of commercial paper notes or for the approval of program proceedings authorizing the periodic issuance of commercial paper notes shall contain the information required by subsection (d) of this section to the extent it is available or capable of being determined.

(f) Unless exempt by statute from Board approval, commercial paper notes to fund any project or projects that will be permanently financed with tuition revenue bonds or general revenues of the state may not be issued unless the issuance of the notes, or the project or projects, have been specifically approved by the Board.

(g) At any time before the date for consideration of an application by the Board, an applicant may withdraw the application. Revisions to an application must be submitted in writing not less than 72 hours prior to the Board meeting.

(h) A member of the Board or bond finance office staff may require additional information to be submitted with respect to a complete notice of intent or application for state securities.

§181.5. Submission of Final Report.

(a) Within 60 days after the delivery of the state securities and receipt of the state security proceeds, the issuer shall submit one electronic copy or one original of a final report in the form required by the bond finance office.

(1) For state securities issued in the form of lease purchases, the reporting requirements of subsection (b) of this section shall be applicable.

(2) For state securities issued in the form of commercial paper notes, the reporting requirements of subsection (c) of this section shall be applicable.

(3) A final report for state securities, other than lease-purchases and commercial paper, must include, but is not limited to:

(A) all actual costs of issuance as well as the underwriting spread for competitive financings, the private placement fee for private placements, all closing costs, and any other costs incurred during the issuance process;

(B) a complete bond transcript, including the preliminary official statement and the final official statement, private placement memorandum, if applicable, or any other offering documents as

well as all other executed documents pertaining to the issuance of the state security.

(4) Issuers of state securities that have entered into interest rate management agreements relating to the securities shall provide to the bond finance office in electronic form, as applicable, a copy of all schedules to the Master Agreement and/or the Credit Support Annex including transaction confirmations.

(b) Within 90 days after the signing of a lease purchase, the purchaser shall submit an original or electronic copy of the lease purchase final report to the bond finance office. A final report for lease purchases must include a detailed explanation of the terms of the lease-purchase agreement, including but not limited to, amount of purchase, trade-in allowance, interest charges, service contracts, remaining draw amount if applicable, and a final or estimated amortization as applicable.

(c) In lieu of the reporting requirements of subsection (a) of this section, an issuer of state securities issued in the form of commercial paper notes shall submit a report to the bond finance office pursuant to §181.10(c) of this title (relating to State Debt Issuer Reports) so long as the issuer has authority to issue commercial paper under the program proceedings approved by the Board or exempt from approval pursuant to §181.9 of this title (relating to State Exemptions).

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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TRD-202103747

Rob Latsha

Executive Director

Texas Bond Review Board

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For further information, please call: (512) 463-1741



CHAPTER 190. ALLOCATION OF STATE'S LIMIT ON CERTAIN PRIVATE ACTIVITY BONDS

34 TAC §§190.1 - 190.8

The Texas Bond Review Board (BRB) adopts amendments to Texas Administrative Code Title 34, Part 9, Chapter 190, Subchapter A, §190.1 General Provisions; §190.2 Allocation and Reservation System; §190.3 Filing Requirements for Applications for Reservation; §190.4 Filing Requirements for Applications for Carryforward; §190.5 Consideration of Qualified Applications by the Board; §190.6 Expiration Provisions; §190.7 Cancellation Withdrawal and Penalty Provisions; and §190.8 Notices, Filings, and Submissions. The amendments to §190.3 are adopted with changes to the proposed text as published in the August 6, 2021, issue of the *Texas Register* (46 TexReg 4833) and will be republished. All other amendments are adopted without changes to the proposed text and will not be republished.

Reasoned Justification for the Adoption of the Amendments

The BRB adopted updates and clarifications to its administrative code rules in Texas Administrative Code Chapter 190 relating

to the BRB's administration of the state's Private Activity Bond (PAB) program. An overview of the changes adopted for Texas Administrative Code, Title 34, Part 9, Chapter 190 is as follows:

Grant Board flexibility to require either a hard copy or an electronic copy for program applications;

Allow applicants more freedom in the type of tools they use to sign documents, specifically granting authorization for and guidance on the use of electronic signatures; and

Correcting or eliminating any outdated language.

Public Comment and BRB Responses

The public comment period on the adopted amendments opened on August 6, 2021 and extended through midnight on Sunday, September 5, 2021. No comments were received during this period.

The BRB held a public meeting to consider comments on the adopted rule changes on Tuesday, September 14, 2021, at 10:00 a.m. in Room 402 of the Clements Building at 300 West 15th Street, Austin, Texas 78701.

The amendments are adopted under Texas Government Code §1372.004 authorizing the BRB to adopt rules relating to its administration of the PAB program.

No other statute, articles, or codes are affected by the adopted rule amendments.

§190.3. Filing Requirements for Applications for Reservation.

(a) Form. Applications must be filed on forms prescribed by the board and must contain all information and documentation required under the Act and this chapter, as applicable.

(b) Application Filing. The issuer shall submit one electronic copy or one original application for reservation. Each application must be accompanied by the following:

(1) the application fee;

(2) the certificate regarding fees, on the form prescribed by the board;

(3) a copy of the inducement resolution or other similar official action taken by the issuer with respect to the bonds and the project which are the subject of the application, certified by an officer of the issuer; or a copy of the certified resolution of the issuer authorizing the filing of the application for reservation, in either case certified with an authorized signature by an officer of the issuer and unless the resolution authorizes the issuer to seek an allocation in multiple program years, adopted within 18 months of the application date'

(4) a copy of the issuer's articles of incorporation as certified by the secretary of state of Texas and bylaws, including amendments thereto and restatements thereof, or alternatively, a certification with an authorized signature by an authorized representative of the issuer that there have been no amendments to the articles of incorporation or bylaws since the last submission of these items to the board;

(5) a copy of the issuer's certificate of continued existence from the secretary of state of Texas dated within 30 days of submission of application, an issuer's certificate of good standing is not an acceptable substitution for this requirement;

(6) a copy of the borrower's and, if the borrower is a partnership, each partner's certificate of good standing from the comptroller of public accounts of Texas, dated within 30 days of submission of application;

(7) a statement by the issuer, other than an issuer of a state-voted issue or the Texas Department of Housing and Community Affairs (TDHCA) or the Texas State Affordable Housing Corporation (TSAHC) that the bonds are not being issued for the same stated purpose for which the issuer has received sufficient carryforward during a prior year or for which there exists unexpended proceeds from a prior issue or issues of bonds issued by the same issuer, or based on the issuer's population;

(8) if unexpended proceeds exist, including transferred proceeds representing unexpended proceeds, from a prior issue or issues of bonds, other than a state-voted issue or an issue by the TDHCA or TSAHC, issued by the issuer or on behalf of the issuer, or based on the issuer's population, for the same stated purpose for which the bonds are the subject of this application, a statement by the trustee as to the current amount of unexpended proceeds that exists for each such issue. The issuer of the prior issue of bonds shall certify to the current amount of unexpended proceeds that exists for each issue should a trustee not administer the bond issues;

(9) if unexpended proceeds, including transferred proceeds representing unexpended proceeds, other than prepayments exist from a prior issue or issues of bonds, other than a state-voted issue or an issue by TDHCA or TSAHC, issued by the issuer or on behalf of the issuer, or based on the issuer's population, for the same stated purpose for which the bonds are the subject of this application, a definite and binding financial commitment agreement must accompany the application in such form as the board finds acceptable, to expend the unexpended proceeds by the later of 12 months after the date of receipt by the board of an application for reservation or December 31 of the program year for which the application is being filed. For purposes of this paragraph, the commitment by lenders to originate and close loans within a certain period of time shall be deemed a definite and binding agreement to expend bond proceeds within such period of time and any additional period of time during which such origination period may be extended under the terms of such agreement; provided that any extension provision may be amended, prior to the date on which the bond authorization requirements described in subsection (c) of this section must be satisfied, to provide that such period shall not be extended beyond the later of 12 months after the date of receipt by the board of an application for reservation or December 31 of the program year for which the application is being filed. For purposes of this paragraph, issuers of qualified student loan bonds authorized by §53B.47, Education Code, may satisfy the requirements of Government Code §1372.028(c)(3)(F), in lieu of a definite and binding agreement, by providing with the application evidence as certified by the issuer that the issuer has purchased, in each of the last three calendar years, qualified student loans in amounts greater than or equal to the amount of the unexpended proceeds;

(10) if unexpended proceeds exist from a prior issue or issues of bonds, other than a state-voted issue or an issue by the TDHCA or TSAHC, issued by the issuer or on behalf of the issuer, or based on the issuer's population, for the same stated purpose for which the bonds are the subject of the pending application, a written opinion of legal counsel, addressed to the board, to the effect, that the board may rely on the representation contained in the application to fulfill the requirements of the Act and that the agreement referred to in paragraph (9) of this subsection constitutes a legal and binding obligation of the issuer, if applicable, and the other party or parties to the agreement;

(11) a written opinion of legal counsel, addressed to the board, stating the bonds are required to be included under the state ceiling and that the issuer is legally authorized to issue bonds for projects of the same type and nature as the project which is the subject of the application. This opinion shall cite by constitutional or statutory reference,

the provision of the Constitution or law of the state which authorizes the bonds for the project;

(12) a qualified mortgage bond issuer that submits an application for reservation as described in §1372.032, Government Code, shall provide a statement certifying to the most recent closing of qualified mortgage bonds determined as provided in §190.2(c)(3) of this title (relating to Allocation and Reservation System), and the most recent date of a reservation received for mortgage revenue bonds and state the government unit(s) for which the local population was based for the issuance of bonds or for receipt of a reservation; and for said issuers who have received an allocation of volume cap for the purposes of issuing qualified mortgage bonds within the six years prior to the date of application, a statement on the form prescribed by the Board as to the utilization percentage relating to its most recent allocation calculated in accordance with Government Code §1372.0261. If during the previous year, a qualified mortgage bond issuer submitted an application for reservation that has not been granted at the time of application for the lottery, the issuer may opt to file a statement explaining whether there are any changes in information from the application filed the previous year in lieu of submitting a complete application. If there are changes, the statement must specify current information. The issuer must pay the same application fee whether filing a statement or a complete application;

(13) For a qualified residential rental project issue, an issuer shall provide a copy of an active executed earnest money contract between the borrower and the seller of the project. The earnest money contract for Tax-Exempt Bond Lottery Applications must be in effect at the time of submission of the application to the board and expire no earlier than December 1 of the year preceding the applicable program year. The earnest money contract must stipulate and provide for the borrower's option to extend the contract expiration date through March 1 of the program year, subject only to the seller's receipt of additional earnest money or extension fees, so that the borrower will have site control at the time a reservation is granted. If the borrower owns the property, evidence of ownership must be provided. For subsequent reservations granted throughout the remainder of the program year, the borrower must provide within the close of three business days following the notification of pending reservation:

(A) if applicable, proof of application for Low Income Housing Tax Credits with TDHCA; and

(B) a copy of an earnest money contract that is in full force and effect or the reservation will automatically expire;

(14) The borrower must be specified in the application for reservation of allocation. The borrower may be identified as a to-be-formed entity only if the application for reservation of allocation specifies a related entity or an entity that will be a component of the to-be-formed entity as borrower;

(15) For qualified residential rental project issues where the borrower is an entity or to-be-formed entity that is designated or intends to seek abatement from ad valorem taxation, that intent to seek abatement must be specified on the application for reservation of allocation;

(16) Each issuer of qualified student loan bonds authorized by §53B.47, Education Code, shall submit with the application for reservation the information as required in Government Code 1372.0281.

(c) Bond authorization requirements. Not later than 35 calendar days after an issue's reservation date, the board or Comptroller of Public Accounts, as applicable, must be in receipt of the following from the issuer:

(1) one-third of the closing fee;

(2) the certificate regarding fees, on the form prescribed by the board;

(3) a certificate signed by the issuer or authorized representative of the issuer that certifies the principal amount of the bonds to be issued or the portion of the state ceiling that will be converted to mortgage credit certificates;

(4) a list of finance team members with their addresses and telephone numbers;

(5) if applicable, an amended agreement pursuant to subsection (b)(9) of this section;

(6) a bond authorization requirements checklist, on the form prescribed by the board;

(7) if the borrower was originally identified as a to-be-formed entity, the final formation of the borrower must be identified as part of the submission and must meet the specifications set forth in the application for reservation of allocation. No changes will be permitted in the general partner of the borrower after the 35th day after the date of reservation;

(8) if an issuer fails to meet the 35-day deadline, the issuer may request a waiver from the board. The board will consider taking action to waive the missed deadline only if:

(A) the board is notified via facsimile transmission or e-mail of the missed deadline and intent to seek waiver not later than 36 calendar days after an issuer's reservation date, and;

(B) the Bond Authorization Requirements filing, accompanied by a statement and evidence regarding extenuating circumstances that prevented a timely filing, is made not later than 38 calendar days after an issuer's reservation date. Extenuating circumstances that would be grounds for waiver include acts of God, unforeseen acts of war, or medical emergency;

(9) an issuer described by Government Code §1372.022(a)(2) is not required to submit items described under paragraphs (1) and (2) of this subsection.

(d) Closing fee. The remaining two-thirds of the fee must be paid by all issuers other than those described by Government Code §1372.022(a)(2) simultaneously with closing on the bonds. The board shall be in receipt of the fee from the issuer as confirmed by the Comptroller of Public Accounts not later than the fifth business day after the day on which the bonds are closed.

(e) Closing documents. Not later than the fifth business day after the day on which the bonds are closed the issuer shall file with the board:

(1) a certificate regarding fees, on the form prescribed by the board;

(2) a closing documents checklist, on the form prescribed by the board;

(3) a certificate of delivery on the form prescribed by the board;

(4) a certified copy of the bond resolution authorizing the issuance of bonds, and setting forth the specific principal amount of the bond issue and, unless the resolution authorizes the issuer to seek an allocation in multiple program years, adopted within one year of the application date;

(5) if one is required, a copy of the approval of the local government unit or local government units, certified by a public official with the authority to certify such approval. This requirement shall not

apply to any bonds for which the Code does not require such a public hearing and approval of a local government unit or local government units;

(6) the document evidencing compliance with Government Code §1372.040;

(7) other documents relating to the issuance of bonds, including a statement of the bonds':

(A) principal amount;

(B) interest rate or the formula by which the interest is calculated;

(C) maturity schedule;

(D) purchaser or purchasers; and

(8) an official statement;

(9) For mortgage credit certificates the issuer shall file item in paragraph (1) of this subsection and the following:

(A) a certified copy of the issuer's resolution electing to convert state ceiling to mortgage credit certificates;

(B) issuer's mortgage credit certificate election; and

(C) program plan.

(10) For a residential rental project described in §190.2(d)(1) or (2) of this title, evidence from the Texas Department of Housing and Community Affairs that an award of Low Income Housing Tax Credits has been approved for the project.

(f) Additional information. The board may require additional information at any time before granting a certificate of reservation or certificate of allocation.

(g) Application restrictions.

(1) In order to submit an application for reservation prior to October 21 of the year immediately preceding the program year an issuer or borrower must have been in existence on October 1 of that year.

(2) Project substitutions will not be allowed after the application for reservation has been delivered to the board. Alterations to the project, including changes to unit size, number of total units and unit mix, as well as changes to the land size necessitated as part of the development or finance approval process in the case of residential rental projects will be permitted only if said changes:

(A) are agreed to by the issuer; and

(B) do not include the addition of land that is the subject of another application in the current program year.

(3) No issuer may submit an application for reservation for the same or substantially the same project or projects as are contained in the application of another issuer.

(4) No issuer prior to August 15 of the program year may apply for an amount that exceeds the maximum application limits as described in Government Code §1372.037(a).

(5) The board may not accept applications for more than one project located at, or related to, a business operation at a particular site for any one program year.

(6) For a qualified residential rental project issue, the Residential Rental Attachment contained in the Application packet for Reservation of Allocation must correctly reflect the regional designation of the project's location at the time of the lottery. If it is

found to be incorrect on or after the lottery date, the project will be placed at the end of the lottery list once the region designation error is detected and corrected.

(7) For a qualified residential rental project, an applicant may not ever amend the priority status of the project once the application for reservation of allocation has been submitted to the Board.

(8) Qualified residential rental projects submitted post-lottery will be placed after all qualified residential rental projects submitted prior to the lottery, regardless of priority designation.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on September 23, 2021.

TRD-202103748

Rob Latsha

Executive Director

Texas Bond Review Board

Effective date: October 13, 2021

Proposal publication date: August 6, 2021

For further information, please call: (512) 463-1741





REVIEW OF AGENCY RULES

This section contains notices of state agency rule review as directed by the Texas Government Code, §2001.039.

Included here are proposed rule review notices, which invite public comment to specified rules under review; and adopted rule review notices, which summarize public comment received as part of the review. The complete text of an agency's rule being reviewed is available in the *Texas Administrative Code* on the Texas Secretary of State's website.

For questions about the content and subject matter of rules, please contact the state agency that is reviewing the rules. Questions about the website and printed copies of these notices may be directed to the *Texas Register* office.

Proposed Rule Reviews

Texas Education Agency

Title 19, Part 2

The State Board of Education (SBOE) proposes the review of 19 Texas Administrative Code (TAC) Chapter 74, Curriculum Requirements, pursuant to the Texas Government Code, §2001.039. The rules being reviewed by the SBOE in 19 TAC Chapter 74 are organized under the following subchapters: Subchapter A, Required Curriculum; Subchapter B, Graduation Requirements; Subchapter C, Other Provisions; Subchapter D, Graduation Requirements, Beginning with School Year 2001-2002; Subchapter E, Graduation Requirements, Beginning with School Year 2004-2005; Subchapter F, Graduation Requirements, Beginning with School Year 2007-2008; and Subchapter G, Graduation Requirements, Beginning with School Year 2012-2013.

As required by the Texas Government Code, §2001.039, the SBOE will accept comments as to whether the reasons for adopting 19 TAC Chapter 74, Subchapters A-G, continue to exist.

The public comment period on the review begins October 8, 2021, and ends at 5:00 p.m. on November 12, 2021. A form for submitting public comments on the proposed rule review is available on the TEA website at [https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_\(TAC\)/State_Board_of_Education_Rule_Review](https://tea.texas.gov/About_TEA/Laws_and_Rules/SBOE_Rules_(TAC)/State_Board_of_Education_Rule_Review). The SBOE will take registered oral and written comments on the review at the appropriate committee meeting in November 2021 in accordance with the SBOE board operating policies and procedures.

TRD-202103839

Cristina De La Fuente-Valadez
Director, Rulemaking
Texas Education Agency
Filed: September 28, 2021



The Texas Education Agency (TEA) proposes the review of 19 TAC Chapter 74, Curriculum Requirements, pursuant to Texas Government Code, §2001.039. The rules being reviewed by TEA in 19 TAC Chapter 74 are organized under Subchapter AA, Commissioner's Rules on College Readiness, and Subchapter BB, Commissioner's Rules Concerning High School Graduation.

As required by Texas Government Code, §2001.039, TEA will accept comments as to whether the reasons for adopting 19 TAC Chapter 74, Subchapters AA and BB, continue to exist.

The public comment period on the review of 19 TAC Chapter 74, Subchapters AA and BB, begins October 8, 2021, and ends November 8, 2021. A form for submitting public com-

ments on the proposed rule review is available on the TEA website at <https://tea.texas.gov/about-tea/laws-and-rules/commissioner-rules-tac/commissioner-of-education-rule-review>.

TRD-202103851

Cristina De La Fuente-Valadez
Director, Rulemaking
Texas Education Agency
Filed: September 29, 2021



Texas Department of Public Safety

Title 37, Part 1

Pursuant to Government Code, §2001.039, the Texas Department of Public Safety (the department) files this notice of intent to review and consider for re adoption, amendment, or repeal the following chapters in Title 37 of the Texas Administrative Code: Chapter 2 (Capitol Access Pass); Chapter 3 (Texas Highway Patrol); Chapter 8 (Capitol Complex); Chapter 9 (Public Safety Communications); Chapter 14 (School Bus Safety Standards); Chapter 15 (Driver License Rules); Chapter 16 (Commercial Driver License); Chapter 23 (Vehicle Inspection); Chapter 25 (Safety Responsibility Regulations); Chapter 35 (Private Security); and Chapter 37 (Sex Offender Registration).

The department will determine whether the reasons for adopting or re adopting these rules continue to exist. Each rule will be reviewed to determine whether it is obsolete, whether the rule reflects current legal and policy considerations, and whether the rule reflects current procedures of the department. Any changes to these rules as a result of the rule review will be published in the Proposed Rules section of the *Texas Register*.

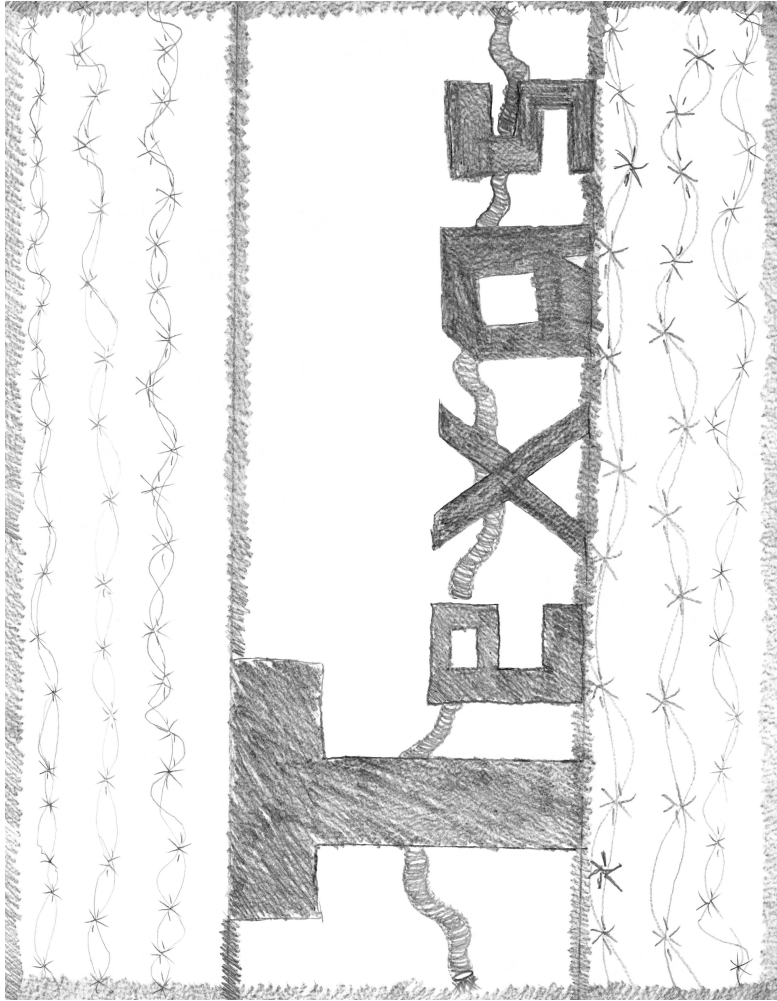
Comments relating to this rule review will be accepted for a 30-day period following publication of this notice in the *Texas Register*. Comments should be directed to: Susan Estringel, Office of General Counsel, Texas Department of Public Safety, P.O. Box 4087, Austin, Texas 78773-0140.

To ensure consideration, comments must clearly specify the particular section of the rule to which they apply. General comments should be labeled as such. Comments should include proposed alternative language as appropriate.

TRD-202103742

D. Phillip Adkins
General Counsel
Texas Department of Public Safety
Filed: September 22, 2021





TABLES &

GRAPHICS

Graphic images included in rules are published separately in this tables and graphics section. Graphic images are arranged in this section in the following order: Title Number, Part Number, Chapter Number and Section Number.

Graphic images are indicated in the text of the emergency, proposed, and adopted rules by the following tag: the word “Figure” followed by the TAC citation, rule number, and the appropriate subsection, paragraph, subparagraph, and so on.

Figure: 25 TAC §289.252(i)(2) [Figure: 25 TAC §289.252(j)(2)]

RADIOISOTOPES		Limit	Unsealed Sources			Sealed Sources	
			10 ³	10 ⁴	10 ⁵	10 ¹⁰	10 ¹²
Pt-141	Gd-152	Bi-209m	U-232	Pu-240	Cm-245	Cf-252	
Ce-142	Dy-154	Po-208	U-233	Pu-241	Cm-246	Es-254	
Nd-144	Dy-156	Po-209	U-234	Pu-242	Cm-247		
Nd-145	Tb-159	Po-210	U-235	Pu-244	Cm-248		
Sm-146	Ho-165	Ra-226	U-236	Am-241	Bk-247		
Sm-147	Hf-174	Ac-227	Np-235	Am-242m	Bk-249		
Sm-148	W-180	Th-228	Np-237	Am-243	Cf-248		
Gd-148	Pt-190	Th-229	Pu-236	Cm-242	Cf-249		
Gd-150	Pb-210	Th-230	Pu-238	Cm-243	Cf-250		
Gd-151	Bi-209	Pa-231	Pu-239	Cm-244	Cf-251		
and any alpha-emitting radionuclide not listed above or mixtures of [unknown] alpha emitters of unknown composition.							
Be-10	Fe-60	Rh-102	Te-123	Sm-145	Lu-175	Ir-199m	
Al-26	Zn-70	Pd-107	Te-130	Nd-150	Lu-176	Pt-192	
Si-32	Ge-68	Ag-108m	I-129	Eu-150	Lu-177m	Pt-198	
Ar-39	Ge-76	Cd-113m	La-137	Tb-157	Hf-172	Hg-194	
K-40	Kr-81	Cd-116	La-138	Tb-158	Hf-182	Pb-202	
Ar-42	Sr-90	Sn-121m	Ce-139	Dy-159	Ta-179	Pb-205	
Ca-48	Zr-96	Sn-123	Pm-143	Ho-166m	Re-184m	Bi-208	
Ti-44	Mo-100	Sn-124	Pm-144	Lu-173	Re-187	Ra-228	
V-49	Tc-98	Sn-126	Pm-145	Lu-174	Re-189	Np-236	
V-50	Rh-101	Te-121m	Pm-146	Lu-174m	Os-194	Bk-248	
and any radionuclide other than alpha-emitting radionuclides, not listed above or mixtures of beta emitters of unknown composition.							
Na-22	Ru-106	Cs-134	Eu-152	Bi-210	U (natural)		
Co-60	Ag-110m	Ce-144	Eu-154	Th (natural)			
				1.0 mCi	10 mCi	100 mCi	10 kCi
				0.1 mCi	1.0 mCi	10 mCi	100 kCi
				0.01 mCi	0.1 mCi	1.0 mCi	10 kCi
				0.01 μCi			

Figure: 25 TAC §289.252(ij)(2) [Figure: 25 TAC §289.252(ij)(2)]

Cl-36	Ni-63	Rb-87	Cd-109	Ba-133	Gd-153	Tm-171	10	10 mCi	100 mCi	1.0 Ci	100 kCi	10 MCi
Ca-45	Zn-65	Zr-93	In-115	Ba-135	Eu-155	W-181	µCi					
Mn-54	Se-75	Nb-93m	Sb-125	Cs-137	Tm-170	Tl-204						
C-14	Co-57	Kr-85	Tc-99	Ir-194	U-238		100	100 mCi	1.0 Ci	10 Ci	1.0 MCi	100 MCi
Fe-55	Ni-59	Tc-97	Pt-193,	Th-232			1.0	1 Ci	10 Ci	100 Ci	10 MCi	1000 MCi
H-3							mCi					

Figure: 25 TAC §289.252(jj)(10)

Broad Scope License Limits

Radioactive material	Type B curies	Type C curies
Antimony-122	1	.01
Antimony-124	1	.01
Antimony-125	1	.01
Arsenic-73	10	.1
Arsenic-74	1	.01
Arsenic-76	1	.01
Arsenic-77	10	.1
Barium-131	10	.1
Barium-140	1	.01
Beryllium-7	10	.1
Bismuth-210	.1	.001
Bromine-82	10	.1
Cadmium-109	1	.01
Cadmium-115m	1	.01
Cadmium-115	10	.1
Calcium-45	1	.01
Calcium-47	10	.1
Carbon-14	100	1
Cerium-141	10	.1
Cerium-143	10	.1
Cerium-144	.1	.001
Cesium-131	100	1
Cesium-134m	100	1
Cesium-134	.1	.001
Cesium-135	1	.01
Cesium-136	10	.1
Cesium-137	.1	.001
Chlorine-36	1	.01
Chlorine-38	100	1
Chromium-51	100	1
Cobalt-57	10	.1
Cobalt-58m	100	1
Cobalt-58	1	.01
Cobalt-60	.1	.001
Copper-64	10	.1
Dysprosium-165	100	1
Dysprosium-166	10	.1
Erbium-169	10	.1
Erbium-171	10	.1
Europium-152 9.2 h	10	.1

Figure: 25 TAC §289.252(jj)(10)

Europium-152 13 y	.1	.001
Europium-154	.1	.001
Europium-155	1	.01
Fluorine-18	100	1
Gadolinium-153	1	.01
Gadolinium-159	10	.1
Gallium-72	10	.1
Germanium-71	100	1
Gold-198	10	.1
Gold-199	10	.1
Hafnium-181	1	.01
Holmium-166	10	.1
Hydrogen-3	100	1
Indium-113m	100	1
Indium-114m	1	.01
Indium-115m	100	1
Indium-115	1	.01
Iodine-125	.1	.001
Iodine-126	.1	.001
Iodine-129	.1	.01
Iodine-131	.1	.001
Iodine-132	10	.1
Iodine-133	1	.01
Iodine-134	10	.1
Iodine-135	1	.01
Iridium-192	1	.01
Iridium-194	10	.1
Iron-55	10	.1
Iron-59	1	.01
Krypton-85	100	1
Krypton-87	10	.1
Lanthanum-140	1	.01
Lutetium-177	10	.1
Manganese-52	1	.01
Manganese-54	1	.01
Manganese-56	10	.1
Mercury-197m	10	.1
Mercury-197	10	.1
Mercury-203	1	.01
Molybdenum-99	10	.1
Neodymium-147	10	.1
Neodymium-149	10	.1
Nickel-59	10	.1
Nickel-63	1	.01

Figure: 25 TAC §289.252(jj)(10)

Nickel-65	10	.1
Niobium-93m	1	.01
Niobium-95	1	.01
Niobium-97	100	1
Osmium-185	1	.01
Osmium-191m	100	1
Osmium-191	10	.1
Osmium-193	10	.1
Palladium-103	10	.1
Palladium-109	10	.1
Phosphorus-32	1	.01
Platinum-191	10	.1
Platinum-193m	100	1
Platinum-193	10	.1
Platinum-197m	100	1
Platinum-197	10	.1
Polonium-210	.01	.0001
Potassium-42	1	.01
Praseodymium-142	10	.1
Praseodymium-143	10	.1
Promethium-147	1	.01
Promethium-149	10	.1
Radium-226	0.01	0.0001
Rhenium-186	10	.1
Rhenium-188	10	.1
Rhodium-103m	1,000	10.
Rhodium-105	10	.1
Rubidium-86	1	.01
Rubidium-87	1	.01
Ruthenium-97	100	1
Ruthenium-103	1	.01
Ruthenium-105	10	.1
Ruthenium-106	.1	.001
Samarium-151	1	.01
Samarium-153	10	.1
Scandium-46	1	.01
Scandium-47	10	.1
Scandium-48	1	.01
Selenium-75	1	.01
Silicon-31	10	.1
Silver-105	1	.01
Silver-110m	.1	.001
Silver-111	10	.1
Sodium-22	0.1	.001

Figure: 25 TAC §289.252(jj)(10)

Sodium-24	1	.01
Strontium-85m	1,000	10
Strontium-85	1	.01
Strontium-89	1	.01
Strontium-90	.01	.0001
Strontium-91	10	.1
Strontium-92	10	.1
Sulphur-35	10	.1
Tantalum-182	1	.01
Technetium-96	10	.1
Technetium-97m	10	.1
Technetium-97	10	.1
Technetium-99m	100	1
Technetium-99	1	.01
Tellurium-125m	1	.01
Tellurium-127m	1	.01
Tellurium-127	10	.1
Tellurium-129m	1	.01
Tellurium-129	100	1
Tellurium-131m	10	.1
Tellurium-132	1	.01
Terbium-160	1	.01
Thallium-200	10	.1
Thallium-201	10	.1
Thallium-202	10	.1
Thallium-204	1	.01
Thulium-170	1	.01
Thulium-171	1	.01
Tin-113	1	.01
Tin-125	1	.01
Tungsten-181	1	.01
Tungsten-185	1	.01
Tungsten-187	10	.1
Vandadium-48	1	.01
Xenon-131m	1,000	10
Xenon-133	100	1
Xenon-135	100	1
Ytterbium-175	10	.1
Yttrium-90	1	.01
Yttrium-91	1	.01
Yttrium-92	10	.1
Yttrium-93	1	.01
Zinc-65	1	.01
Zinc-69m	10	.1

Figure: 25 TAC §289.252(jj)(10)

Zinc-69	100	1
Zirconium-93	1	.01
Zirconium-95	1	.01
Zirconium-97	1	.01
Any radioactive material other than alpha emitting radioactive material not listed above	.1	.001

Figure: 25 TAC §289.252(mm)

Rule Cross Reference	Name of Records/Documents	Time Interval for Keeping Record/Document
(l)(7)(D)	Documentation of all receipts and transfers for the manufacture and commercial distribution of devices	3 years after the date of the event (i.e. receipt or transfer)
(r)(2)(C)	Records of tests and checks of measurements of the radioactivity of radioactive drugs	A minimum of 3 years after when the record was made
(r)(3)(G)	A complete description of any deviation from the manufacturer's instructions when eluting generators or processing radioactive materials with a reagent kit	3 years after the record was made
(s)(4)(G)	Records including the name, address, and point of contact for each general licensee to whom depleted uranium in products or devices is distributed	2 years after the record was made
(x)(10)	Test results and records for generator eluates of molybdenum-99 breakthrough or strontium-82 and strontium-85 contamination	3 years after the record was made
(cc)(6)(B)(v)	All information supporting the report of a transfer of small quantities of source material	1 year after the transfer event is included in a report to the agency, the NRC, or any agreement state
(gg)(7)	Records of information important to the safe and effective decommissioning of the facility	Until the license is terminated by the agency
(ii)(3)(G)(i)	Confirmation of receipt of a notification to the individual of the right to complete, correct and explain any reasons for denial of personnel access authorization	1 year after the date of the notification
(ii)(3)(H)(i)	Documentation regarding the trustworthiness and reliability of individual employees	3 years after the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material
(ii)(3)(H)(ii)	Copy of the current access authorization program procedures	3 years after the procedure is no longer needed
(ii)(3)(H)(ii)	Superseded material for any portion(s) of the access authorization program procedures that is superseded	3 years after the procedure or any portion(s) of the procedure is superseded

Figure: 25 TAC §289.252(mm)

Rule Cross Reference	Name of Records/Documents	Time Interval for Keeping Record/Document
(ii)(3)(H)(iii)	List of persons approved for unescorted access authorization	3 years after the list is superseded or replaced
(ii)(4)(A)(ii)	Certification in writing that each individual employee's identification was properly reviewed and any documents used for the review	3 years after the date an individual granted unescorted access to category 1 or category 2 quantities of radioactive material no longer requires such access, or, for an individual denied access, 3 years from the date the record was made
(ii)(6)(A)(xii)	Written confirmation of an active security clearance from the agency or employer that granted the clearance or reviewed the criminal history records check of the individual	3 years after the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material
(ii)(6)(A)(xiii)	Written verification from a service provider licensee for an individual employed by that service provider that it has conducted a background investigation for the individual and approved that individual for unescorted access to category 1 or category 2 quantities of radioactive material	3 years after the date the individual employee no longer requires unescorted access to category 1 or category 2 quantities of radioactive material
(ii)(6)(B)	Written confirmation from an agency or employer that reviewed the criminal history records check for an individual who has had a favorably adjudicated U.S. Government criminal history records check within the last 5 years, under a comparable U.S. Government program involving fingerprinting and an FBI identification and criminal history records check provided that he or she makes available the appropriate documentation	3 years after the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material
(ii)(7)(E)	All fingerprint and criminal history records on an individual (including data indicating no record) received from the FBI, or a copy of these records if the individual's file has been transferred	3 years after the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material

§289.252 Rule Cross Reference	Name of Records/Documents	Time Interval for Keeping Record/Document
(ii)(8)(C)	Access authorization program review records	3 years after the record was made
(ii)(10)(A)(iv)	Copy of the current security plan	3 years after the record is no longer needed
(ii)(10)(A)(iv)	Copy of superseded material from any portion of the security plan that is superseded	3 years after the record is superseded
(ii)(10)(B)(iii)	Copy of the current implementing procedures	3 years after the procedure is no longer needed
(ii)(10)(B)(iii)	Any superseded portion(s) of the implementing procedures	3 years after the record is superseded
(ii)(10)(C)(iv)	Copies of initial and refresher training	3 years after the date of the training
(ii)(10)(D)(viii)(I)	Copy of the information protection procedures	3 years after the document is no longer needed
(ii)(10)(D)(viii)(II)	List of individuals approved for access to the security plan, or implementing procedures, <u>or the list of individuals that have been approved for unescorted access</u>	3 years after the document is no longer needed
(ii)(11)(C)	Documentation of the licensee's efforts to coordinate with the LLEA	3 years after the record was made
(ii)(14)(B)	Records on maintenance and testing activities	3 years after the record was made
(ii)(16)(C)	Security program review documentation	3 years after the record was made
(ii)(18)(D)	Verification documentation for any transfer of category 1 or category 2 quantity of radioactive material	3 years after the record was made
(ii)(20)(E)	Documentation, and any revisions thereof, for the preplanning and coordination of shipments of category 1 or category 2 quantities of radioactive material	3 years after the record was made
(ii)(21)(E)	Copy of the advance notification and any revision and cancellation notices for the shipment of category 1 quantities of radioactive material through or across boundaries of a State	3 years after the record was made
(II)(2)	Documentation of any installation, repair, or maintenance of devices containing sealed sources of radioactive material	5 years after date of service

Figure: 25 TAC §289.256(xxx) [Figure: 25 TAC §289.256(www)]

Rule Cross Reference	Name of Records/Documents	Time Interval for Keeping Records/Documents
§289.201(d)(1)	Records of receipt, transfer, and disposal of radioactive material	Until disposal is authorized by the agency
§289.201(g)(7), §289.202(bbb)	Records of leak tests for specific devices and sealed sources]	3 years]
§289.203(b)(1)(B)	Current applicable sections of this chapter as listed in the radioactive material license	Until termination of the radioactive material license
§289.203(b)(1)(B)	Copy of the current radioactive material license	Until termination of the radioactive material license
§289.203(b)(1)(C), §289.256(f)(3)(A)	Current operating, safety, and emergency procedures	Until termination of the radioactive material license
§289.256(f)(3)(C)(i)	Qualifications of RSO	Duration of employment
§289.256(f)(3)(C)(ii)	Qualifications of authorized users	Duration of employment
§289.256(f)(3)(C)(iii)	Qualifications of authorized medical physicist	Duration of employment
§289.256(f)(3)(C)(iv)	Qualifications of authorized nuclear pharmacist, if applicable	Duration of employment
§289.256(g)(1)	Authority of RSO]	Duration of employment]
§289.256(g)(5)	Qualifications and dates of service for temporary RSO	3 years
§289.256(g)(9)(A)	Actions taken by the licensee's management	5 years
§289.256(g)(9)(B)	Authority, duties, and responsibilities of the RSO and the RSO's agreement to implement the radiation safety program.	Until termination of the radioactive material license
§289.256(g)(9)(C)	Document appointing the ARSO	5 years after the ARSO is removed from the license
§289.256(i)(4)	RSC meetings	3 years
§289.256(t)(3)	Written directives	3 years
§289.256(t)(4)(C)	Procedures for administrations requiring a written directive	Until termination of the radioactive material license
§289.256(v)(4)	Calibration of instruments (dose calibrators)	3 years
§289.256(w)(5)	Calibration of survey instruments	3 years
§289.256(x)(6)	Dosage determinations of unsealed radioactive material for medical use	3 years
§289.256(z)(2)	Physical inventory for all sealed source/brachytherapy inventory	3 years
§289.256(bb)(3)	Surveys for ambient radiation exposure rate	3 years

Figure: 25 TAC §289.256(xxx) [~~Figure: 25 TAC §289.256(www)~~]

Rule Cross Reference	Name of Records/Documents	Time Interval for Keeping Records/Documents
§289.256(cc)(3)	Patient release	3 years after date of release
§289.256(ddd)(2)		
§289.256(dd)(3)	Mobile nuclear medicine service client letters	Duration of licensee/client relationship
§289.256(dd)(3)	Mobile nuclear medicine service surveys	3 years
§289.256(ee)(2)	Decay in storage/disposal	3 years
§289.256(ii)(4)	<u>Permissible Molybdenum-99, Strontium-82, and Strontium-85 concentrations</u>	3 years
§289.256(ll)(2)	Safety instructions - unsealed radioactive materials	3 years
§289.256(ss)(3)	Surveys after sealed source implant and removal	3 years
§289.256(tt)(3)	Brachytherapy sealed sources accountability	3 years
§289.256(uu)(2)	Safety <u>instruction to personnel</u> [instructions — brachytherapy]	3 years
§289.256(ww)(4)	Calibration measurements of brachytherapy sealed sources	3 years
§289.256(xx)(3)	<u>Activity of each Strontium 90</u> [activity of] source	Duration of life of source
§289.256(xx)(2)		
§289.256(bbb)(2)	Service provider documentation	3 years
§289.256(fff)(4)	Installation, maintenance, adjustment and repair-remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units	3 years
§289.256(ggg)(6)	<u>Written safety and operating procedures</u>	<u>Until licensee no longer possesses unit</u>
§289.256(ggg)(7)	<u>Instruction/drills</u> [Written safety procedures and instructions/drills] for remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units	<u>3 years</u> [Until licensee no longer possesses unit]
§289.256(iii)(3)	Dosimetry equipment calibration, intercomparison and comparison	Until termination of the radioactive material license
§289.256(jjj)(7)	Calibration – teletherapy units	3 years
§289.256(kkk)(9)	Calibration – remote afterloader units	3 years

Figure: 25 TAC §289.256(xxx) [~~Figure: 25 TAC §289.256(www)~~]

Rule Cross Reference	Name of Records/Documents	Time Interval for Keeping Records/Documents
§289.256(III)(7)	Calibration – gamma stereotactic radiosurgery units	3 years
§289.256(mmm)(2)	Written procedures for spot checks- teletherapy units	Until licensee no longer possesses unit
§289.256(mmm)(6)	Spot checks- teletherapy units	Until licensee no longer possesses unit
§289.256(mnn)(2)	Written procedures for spot checks - remote afterloaders	3 years
§289.256(mnn)(6)	Spot checks- remote afterloader	3 years
§289.256(ooo)(2)	Written procedures for spot checks-gamma stereotactic radiosurgery units	3 years
§289.256(ooo)(8)	Spot checks-gamma stereotactic radiosurgery units	3 years
§289.256(ppp)(5)	Technical requirements for mobile remote afterloader units	3 years
§289.256(qqq)(3)	Radiation surveys	Duration of the use of the unit
§289.256(rrr)(3)	<u>Full-inspection servicing records for teletherapy and gamma stereotactic radiosurgery units</u> [Five year inspection for teletherapy and gamma stereotactic radiosurgery units]	Duration of the use of the unit
§289.256(uuu)(9)	Annotated report – medical event	Until termination of the radioactive material license
§289.256(vvv)(8)	Annotated report – dose to embryo/fetus or nursing child	Until termination of the radioactive material license

Figure: 25 TAC §289.257(i)(3)(E)(i) [~~Figure: 25 TAC §289.257(i)(5)(E)(i)~~]

$$CSI = 10 \left[\frac{\text{grams}^{235}\text{U}}{X} + \frac{\text{grams}^{233}\text{U}}{Y} + \frac{\text{gramsPu}}{Z} \right]$$

Table 257-1
 Mass Limits for General License Packages Containing Mixed Quantities of Fissile Material or Uranium-235 of Unknown Enrichment per §289.257(i)(3)(E) [~~§289.257(i)(5)(E)~~]

Fissile Material	Fissile material mass mixed with moderating substances having an average hydrogen density less than or equal to H ₂ O. (grams)	Fissile material mass mixed with moderating substances having an average hydrogen density greater than H ₂ O ^a . (grams)
²³⁵ U (X).....	60	38
²³³ U (Y).....	43	27
²³⁹ PU or ²⁴¹ PU (Z).....	37	24

^aWhen mixtures of moderating substances are present, the lower mass limits shall be used if more than 15% of the moderating substance has an average hydrogen density greater than H₂O.

Table 257-2
 Mass Limits for General License Packages Containing Uranium-235 of Known Enrichment per §289.257(i)(3)(E) [~~§289.257(i)(5)(E)~~]

Uranium enrichment in weight percent of ²³⁵ U not exceeding	Fissile material mass of ²³⁵ U (X). (grams)
24.....	60
20.....	63
15.....	67
11.....	72
10.....	76
9.5.....	78
9.....	81
8.5.....	82
8.....	85
7.5.....	88
7.....	90
6.5.....	93
6.....	97

5.5.....	102
5.....	108
4.5.....	114
4.....	120
3.5.....	132
3.....	150
2.5.....	180
2.....	246
1.5.....	408
1.35.....	480
1.....	1,020
0.92.....	1,800

Figure: 25 TAC §289.257(i)(4)(E)(i) [~~Figure: 25 TAC §289.257(i)(6)(E)(i)~~]

$$CSI = 10 \left[\frac{\text{grams}^{239}\text{Pu} + \text{grams}^{241}\text{Pu}}{24} \right]; \text{ and}$$

IN ADDITION

The *Texas Register* is required by statute to publish certain documents, including applications to purchase control of state banks, notices of rate ceilings issued by the Office of Consumer Credit Commissioner, and consultant proposal requests and awards. State agencies also may publish other notices of general interest as space permits.

Comptroller of Public Accounts

Certification of the Average Closing Price of Gas and Oil - August 2021

The Comptroller of Public Accounts, administering agency for the collection of the Oil Production Tax, has determined, as required by Tax Code, §202.058, that the average taxable price of oil for reporting period August 2021 is \$49.12 per barrel for the three-month period beginning on May 1, 2021, and ending July 31, 2021. Therefore, pursuant to Tax Code, §202.058, oil produced during the month of August 2021, from a qualified low-producing oil lease, is not eligible for credit on the oil production tax imposed by Tax Code, Chapter 202.

The Comptroller of Public Accounts, administering agency for the collection of the Natural Gas Production Tax, has determined, as required by Tax Code, §201.059, that the average taxable price of gas for reporting period August 2021 is \$2.51 per mcf for the three-month period beginning on May 1, 2021, and ending July 31, 2021. Therefore, pursuant to Tax Code, §201.059, gas produced during the month of August 2021, from a qualified low-producing well, is eligible for a 50% credit on the natural gas production tax imposed by Tax Code, Chapter 201.

The Comptroller of Public Accounts, administering agency for the collection of the Franchise Tax, has determined, as required by Tax Code, §171.1011(s), that the average closing price of West Texas Intermediate crude oil for the month of August 2021 is \$67.71 per barrel. Therefore,

pursuant to Tax Code, §171.1011(r), a taxable entity shall not exclude total revenue received from oil produced during the month of August 2021, from a qualified low-producing oil well.

The Comptroller of Public Accounts, administering agency for the collection of the Franchise Tax, has determined, as required by Tax Code, §171.1011(s), that the average closing price of gas for the month of August 2021 is \$4.03 per MMBtu. Therefore, pursuant to Tax Code, §171.1011(r), a taxable entity shall exclude total revenue received from gas produced during the month of August 2021, from a qualified low-producing gas well.

This agency hereby certifies that legal counsel has reviewed this notice and found it to be within the agency's authority to publish.

TRD-202103843

William Hamner

Special Counsel for Tax Administration

Comptroller of Public Accounts

Filed: September 28, 2021



Local Sales Tax Rate Changes Effective October 1, 2021

A 1 percent local sales and use tax will become effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Ellinger (Fayette Co)	2075073	.015000	.077500

A 1 1/2 percent local sales and use tax will become effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Sandy Point (Brazoria Co)	2020257	.020000	.082500

The city sales and use tax will be increased to 1 1/4 percent as permitted under Chapter 321 of the Texas Tax Code, effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Watauga (Tarrant Co)	2220282	.020000	.082500

The city sales and use tax will be increased to 1 1/2 percent as permitted under Chapter 321 of the Texas Tax Code, effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Deport (Lamar and Red River Co)	2139022	.020000	.082500

The city sales and use tax will be increased to 1 3/4 percent as permitted under Chapter 321 of the Texas Tax Code, effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Yorktown (DeWitt Co)	2062014	.020000	.082500

The city sales and use tax will be increased to 2 percent as permitted under Chapter 321 of the Texas Tax Code, effective October 1, 2021 in the cities listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Grandfalls (Ward Co)	2238022	.020000	.082500
Uncertain (Harrison Co)	2102052	.020000	.082500

An additional 1/2 percent city sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 505 of the Texas Local Government Code, Type B Corporations (4B) will be abolished September 30, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Pilot Point (Denton and Grayson Co)	2061042	.020000	.082500

The additional 1/4 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 504 of the Texas Local Government Code, Type A Corporations (4A) will be reduced to 1/8 percent effective September 30, 2021 and an additional 1/8 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 505 of the Texas Local Government Code, Type B Corporations (4B) will become effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
De Leon (Comanche Co)	2047014	.020000	.082500

The additional 1/2 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 504 of the Texas Local Government Code, Type A Corporations (4A) will be abolished effective September 30, 2021 and an additional 1/2 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 505 of the Texas Local Government Code, Type B Corporations (4B) will become effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Slaton (Lubbock Co)	2152024	.020000	.082500

The additional 1/2 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 505 of the Texas Local Government Code, Type B Corporations (4B) will be reduced to 1/4 percent effective September 30, 2021 and the 1 1/4 percent city sales and use tax will be increased to 1 1/2 percent as permitted under Chapter 321 of the Texas Tax Code effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Hickory Creek (Denton Co)	2061186	.020000	.082500

The additional 1/2 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 504 of the Texas Local Government Code, Type A Corporations (4A) will be abolished effective September 30, 2021 and the 1 percent city sales and use tax will be increased to 1 1/2 percent as permitted under Chapter 321 of the Texas Tax Code effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Fate (Rockwall Co)	2199047	.020000	.082500

The additional 1/2 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 504 of the Texas Local Government Code, Type A Corporations (4A) and the additional 1/4 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 505 of the Texas Local Government Code, Type B Corporations (4B) will be abolished effective September 30, 2021 and the 1 percent city sales and use tax will be increased to 1 3/4 percent as permitted under Chapter 321 of the Texas Tax Code effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Von Ormy (Bexar Co)	2015245	.020000	.082500

The additional 1/2 percent sales and use tax for improving and promoting economic and industrial development as permitted under Chapter 505 of the Texas Local Government Code, Type B Corporations (4B) will be reduced to 1/4 percent effective September 30, 2021 and an additional 1/4 percent sales and use tax for Municipal Street Maintenance and Repair as permitted under Chapter 327 of the Texas Tax Code will become effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Krum (Denton Co)	2061140	.020000	.082500

An additional 1/2 percent city sales and use tax for property tax relief under Chapter 321 of the Texas Tax Code will be abolished September 30, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Jersey Village (Harris Co)	2101133	.020000	.082500

An additional 1/2 percent city sales and use tax for property tax relief under Chapter 321 of the Texas Tax Code will be abolished September 30, 2021 in the city listed below and the 1 percent city sales and use tax will be increased to 1 1/2 percent as permitted under Chapter 321 of the Texas Tax Code effective October 1, 2021 in the city listed below. There will be no change in the local rate or total rate.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Killeen (Bell Co)	2014022	.020000	.082500

An additional 1/4 percent city sales and use tax for Municipal Street Maintenance and Repair as permitted under Chapter 327 of the Texas Tax Code will be abolished effective September 30, 2021 in the cities listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Higgins (Lipscomb Co)	2148012	.017500	.080000
Lakeside (Tarrant Co)	2220175	.017500	.080000
Rocksprings (Edwards Co)	2069017	.015000	.077500

An additional 1 percent city sales and use tax for Municipal Street Maintenance and Repair as permitted under Chapter 327 of the Texas Tax Code will be abolished effective September 30, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Trent (Taylor Co)	2221030	.010000	.072500

An additional 1/4 percent city sales and use tax for Municipal Street Maintenance and Repair as permitted under Chapter 327 of the Texas Tax Code will become effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Primera (Cameron Co)	2031129	.020000	.082500

An additional 1 percent city sales and use tax for Municipal Street Maintenance and Repair as permitted under Chapter 327 of the Texas Tax Code will become effective October 1, 2021 in the city listed below.

CITY NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
Log Cabin (Henderson Co)	2107164	.020000	.082500

The special purpose district sales and use tax will be increased to 1 3/4 percent as permitted under Chapter 775 of the Texas Health and Safety Code, effective October 1, 2021 in the special purpose district listed below.

SPD NAME	LOCAL CODE	LOCAL RATE	TOTAL RATE
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Williamson County Emergency Services District No. 4	5246567	.020000	.082500
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A 1/2 percent special purpose district sales and use tax will become effective October 1, 2021 in the special purpose districts listed below.

SPD NAME	LOCAL CODE	NEW RATE	DESCRIPTION
Jersey Village Fire Control, Prevention and EMS District	5101972	.005000	SEE NOTE 1
Johnson County Emergency Services District No. 1	5126508	.005000	SEE NOTE 2
Pilot Point Municipal Development District	5061729	.005000	SEE NOTE 3

A 1 percent special purpose district sales and use tax will become effective October 1, 2021 in the special purpose districts listed below.

SPD NAME	LOCAL CODE	NEW RATE	DESCRIPTION
Fort Bend County Emergency Services District No. 5	5079710	.010000	SEE NOTE 4
Johnson County Emergency Services District No. 1-A	5126517	.010000	SEE NOTE 5

A 1 1/2 percent special purpose district sales and use tax will become effective October 1, 2021 in the special purpose districts listed below.

SPD NAME	LOCAL CODE	NEW RATE	DESCRIPTION
Brazos County Emergency Services District No. 1	5021513	.015000	SEE NOTE 6
El Paso County Emergency Services District No. 1	5071512	.015000	SEE NOTE 7
Liberty County Emergency Services District No. 1	5146540	.015000	SEE NOTE 8
Parker County Emergency Service District No. 1-A	5184552	.015000	SEE NOTE 9

A 2 percent special purpose district sales and use tax will become effective October 1, 2021 in the special purpose districts listed below.

SPD NAME	LOCAL CODE	NEW RATE	DESCRIPTION
Limestone County Emergency Services District No. 2	5147503	.020000	SEE NOTE 10
Johnson County Emergency Services District No. 1-B	5126526	.020000	SEE NOTE 11
Williamson County Emergency Services District No. 4-A	5246601	.020000	SEE NOTE 12

NOTE 1: The boundaries of the Jersey Village Fire Control, Prevention and EMS District are the same boundaries as the city of Jersey Village.

NOTE 2: The boundaries of the Johnson County Emergency Services District No. 1 are the same boundaries as the portion of the city of Cresson located in Johnson County. Contact the district representative at 817-556-2212 for additional boundary information.

NOTE 3: The Pilot Point Municipal Development District boundaries include the city of Pilot Point and extra-territorial jurisdiction area in Denton and Grayson counties. The district excludes any portion of the city or its extra-territorial jurisdiction in Cooke County. The unincorporated areas of Denton and Grayson counties in ZIP Code 76258 are partially located in the Pilot Point Municipal Development District. Contact the district representative at 940-686-2165 for additional boundary information.

NOTE 4: The Fort Bend County Emergency Services District No. 5 is located in the north central portion of Fort Bend County. The district may include areas within the district responsible for collecting and remitting sales and use tax to the city of Houston for Strategic Partnership Agreement between a utility district and the city. The district partially overlaps portions of Fort Bend County Assistance District Nos. 2 and 6, which have a special purpose district sales and use tax. The district excludes the Fort Bend County Assistance District No. 11 and Aliana Management District, which have a special purpose district sales and use tax, and the cities of Richmond and Sugar Land. The unincorporated areas of Fort Bend County in ZIP Codes 77083, 77407 and 77498 are partially located within the Fort Bend County Emergency Services District No. 5. Contact the district representative at 713-984-8222 for additional boundary information.

NOTE 5: The Johnson County Emergency Services District No. 1-A is the portion of the district located in the city of Briar Oaks. Contact the district representative at 817-556-2212 for additional boundary information.

NOTE 6: The Brazos County Emergency Services District No. 1 is located in the southern portion of Brazos County, which has a county sales and use tax. The district excludes the city of Navasota. The unincorporated areas of Brazos County in ZIP Codes 77845, 77866, 77868 and 77879 are partially located in the Brazos County Emergency Services District No. 1. Contact the district representative at 713-984-8222 for additional boundary information.

NOTE 7: The El Paso County Emergency Services District No. 1 is located in central El Paso County, which has a county sales and use tax. The district excludes the city of Horizon City. The unincorporated areas of El Paso County in ZIP Codes 79927 and 79928 are partially located within El Paso County Emergency Services District No. 1. Contact the district representative at 713-984-8222 for additional boundary information.

NOTE 8: The Liberty County Emergency Services District No. 1 is located in the southwestern portion of Liberty County, which has a county sales and use tax. The district excludes, for sales tax purposes, the city of Kenefick. The unincorporated areas of Liberty County in ZIP Code 77535 are partially located within Liberty County Emergency Services District No. 1. Contact the district representative at 936-334-9654 for additional boundary information.

NOTE 9: The Parker County Emergency Services District No. 1-A is the unincorporated portion of the original district excluding the area within the cities of Annetta South, Peaster and the Springtown/Parker County Emergency Services District No. 1 combined area, which all have sales and use tax. The district excludes for sales tax the cities of Aledo, Annetta, Annetta North and Springtown. The unincorporated areas of Parker County in ZIP Codes 76008, 76020, 76073, 76082, 76085, 76087, 76088, 76108, 76126, 76485 and 76487 are partially located within the district. Contact the district at 817-523-7598 for additional boundary information.

NOTE 10: The Limestone County Emergency Services District No. 2 is located in the southeastern portion of Limestone County. The unincorporated areas of Limestone County in ZIP Codes 76642 and 76687 are partially located within the Limestone County Emergency Services District No. 2. Contact the district representative at 254-729-3025 for additional boundary information.

NOTE 11: The Johnson County Emergency Services District No. 1-B is located in the unincorporated portions of Johnson County. The district excludes the cities of Alvarado, Burleson, Cleburne, Cross Timber, Crowley, Godley, Grandview, Joshua, Keene, Mansfield, Rio Vista and Venus. Contact the district representative at 817-556-2212 for additional boundary information.

NOTE 12: The Williamson County Emergency Services District No. 4-A is located in the western portion of Williamson County. The district excludes the Liberty Hill Library District, and for sales tax purposes, the city of Liberty Hill, which both impose sales and use tax. The unincorporated areas of Williamson County in ZIP codes 76527, 78605, 78628, 78633, 78641 and 78642 are partially located within Williamson County Emergency Services District 4-A. Contact the district representative at 512-515-5165 for additional boundary information.

TRD-202103844
William Hamner
Special Counsel for Tax Administration
Comptroller of Public Accounts
Filed: September 28, 2021

◆ ◆ ◆
Office of Consumer Credit Commissioner

Notice of Rate Ceilings

The Consumer Credit Commissioner of Texas has ascertained the following rate ceilings by use of the formulas and methods described in §303.003 and §303.009, Texas Finance Code.

The weekly ceiling as prescribed by §303.003 and §303.009 for the period of 10/04/21 - 10/10/21 is 18% for Consumer¹/Agricultural/Commercial² credit through \$250,000.

The weekly ceiling as prescribed by §303.003 and §303.009 for the period of 10/04/21 - 10/10/21 is 18% for Commercial over \$250,000.

¹ Credit for personal, family or household use.

² Credit for business, commercial, investment or other similar purpose.

TRD-202103847
Leslie L. Pettijohn
Commissioner
Office of Consumer Credit Commissioner
Filed: September 28, 2021

◆ ◆ ◆
Texas Commission on Environmental Quality

Agreed Orders

The Texas Commission on Environmental Quality (TCEQ or commission) staff is providing an opportunity for written public comment on the listed Agreed Orders (AOs) in accordance with Texas Water Code, (TWC), §7.075. TWC, §7.075, requires that before the commission may approve the AOs, the commission shall allow the public an opportunity to submit written comments on the proposed AOs. TWC, §7.075, requires that notice of the proposed orders and the opportunity to comment must be published in the *Texas Register* no later than the 30th day before the date on which the public comment period closes, which in this case is **November 8, 2021**. TWC, §7.075, also requires that the commission promptly consider any written comments received and that the commission may withdraw or withhold approval of an AO if a comment discloses facts or considerations that indicate that consent is inappropriate, improper, inadequate, or inconsistent with the requirements of the statutes and rules within the commission's jurisdiction or the commission's orders and permits issued in accordance with the commission's regulatory authority. Additional notice of changes to a proposed AO is not required to be published if those changes are made in response to written comments.

A copy of each proposed AO is available for public inspection at both the commission's central office, located at 12100 Park 35 Circle, Building C, 1st Floor, Austin, Texas 78753, (512) 239-2545 and at the applicable regional office listed as follows. Written comments about an AO should be sent to the enforcement coordinator designated for each AO at the commission's central office at P.O. Box 13087, Austin, Texas 78711-3087 and must be received by 5:00 p.m. on **November 8, 2021**. Written comments may also be sent by facsimile machine to the enforcement coordinator at (512) 239-2550. The commission's enforcement coordinators are available to discuss the AOs and/or the comment procedure at the listed phone numbers; however, TWC, §7.075, provides that comments on the AOs shall be submitted to the commission in writing.

(1) COMPANY: AC Bluebonnet LP; DOCKET NUMBER: 2021-0884-WQ-E; IDENTIFIER: RN104730890; LOCATION: Winters, Runnels County; TYPE OF FACILITY: operator; RULE VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a multi-sector general permit (stormwater); PENALTY: \$875; ENFORCEMENT COORDINATOR: Caleb Olson, (817) 588-5856; REGIONAL OFFICE: 1977 Industrial Boulevard, Abilene, Texas 79602-7833, (325) 698-9674.

(2) COMPANY: Aqua Utilities, Incorporated; DOCKET NUMBER: 2021-0181-PWS-E; IDENTIFIER: RN101240174; LOCATION: Pearland, Brazoria County; TYPE OF FACILITY: public water supply; RULE VIOLATED: 30 TAC §290.46(n)(3), by failing to keep on file copies of well completion data as defined by 30 TAC §290.41(c)(3)(A) for as long as the well remains in service; PENALTY: \$70; ENFORCEMENT COORDINATOR: Samantha Duncan, (512) 239-2511; REGIONAL OFFICE: 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(3) COMPANY: Brook Retail Incorporated dba Brooks Food Mart 2; DOCKET NUMBER: 2021-0700-PST-E; IDENTIFIER: RN101723856; LOCATION: San Antonio, Bexar County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50 and §334.54(c)(1) and TWC, §26.3475(c)(1), by failing to monitor a temporarily out-of-service underground storage tank system for releases; PENALTY: \$3,375; ENFORCEMENT COORDINATOR: Terrany Binford, (512) 239-1116; REGIONAL OFFICE: 14250 Judson Road, San Antonio, Texas 78233-4480, (210) 490-3096.

(4) COMPANY: CUSTOM SKIN CO; DOCKET NUMBER: 2021-0816-WQ-E; IDENTIFIER: RN100665413; LOCATION: San Angelo, Tom Green County; TYPE OF FACILITY: operator; RULE VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a multi-sector general permit (stormwater); PENALTY: \$875; ENFORCEMENT COORDINATOR: Stephanie Frederick, (512) 239-1001; REGIONAL OFFICE: 622 South Oakes, Suite K, San Angelo, Texas 76903-7035, (325) 655-9479.

(5) COMPANY: G&K Petroleum LLC dba Star Food & Fuel; DOCKET NUMBER: 2021-0604-PST-E; IDENTIFIER: RN102357605; LOCATION: Huntington, Angelina County; TYPE

OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the underground storage tanks for releases at a frequency of at least once every 30 days; PENALTY: \$3,375; ENFORCEMENT COORDINATOR: Tyler Richardson, (512) 756-3994; REGIONAL OFFICE: 3870 Eastex Freeway, Beaumont, Texas 77703-1830, (409) 898-3838.

(6) COMPANY: Gilmer Cstore Investment LLC dba Rise N Run 11; DOCKET NUMBER: 2021-0393-PST-E; IDENTIFIER: RN103993325; LOCATION: Gilmer, Upshur County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.7(d)(1)(E) and (3), by failing to provide an amended registration form for any change or additional information regarding the underground storage tanks (USTs) within 30 days of the occurrence of the change or addition; and 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the USTs for releases in a manner which will detect a release at a frequency of at least once every 30 days; PENALTY: \$4,500; ENFORCEMENT COORDINATOR: Ken Moller, (512) 239-6111; REGIONAL OFFICE: 2916 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

(7) COMPANY: Harris County Municipal Utility District Number 536; DOCKET NUMBER: 2021-0754-MWD-E; IDENTIFIER: RN106956428; LOCATION: Katy, Harris County; TYPE OF FACILITY: wastewater treatment facility; RULES VIOLATED: 30 TAC §305.125(1), (4), and (5), TWC, §26.121(a)(1), and Texas Pollutant Discharge Elimination System Permit Number WQ0015292001, Permit Conditions Numbers 2.d and 2.g, by failing to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment; PENALTY: \$20,000; ENFORCEMENT COORDINATOR: Harley Hobson, (512) 239-1337; REGIONAL OFFICE: 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(8) COMPANY: K & K Incorporated; DOCKET NUMBER: 2021-0691-PST-E; IDENTIFIER: RN101435246; LOCATION: White Deer, Carson County; TYPE OF FACILITY: fleet refueling facility; RULES VIOLATED: 30 TAC §334.8(c)(4)(A)(vii) and (5)(B)(ii), by failing to renew a previously issued underground storage tank (UST) delivery certificate by submitting a properly completed UST registration and self-certification form at least 30 days before the expiration date; 30 TAC §334.8(c)(5)(A)(i) and TWC, §26.3467(a), by failing to make available to a common carrier a valid, current TCEQ delivery certificate before accepting delivery of a regulated substance into the USTs; and 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the USTs for releases in a manner which will detect a release at a frequency of at least once every 30 days; PENALTY: \$6,625; ENFORCEMENT COORDINATOR: Sarah Smith, (512) 239-4495; REGIONAL OFFICE: 3918 Canyon Drive, Amarillo, Texas 79109-4933, (806) 353-9251.

(9) COMPANY: LICATOVICH, CHRIS; DOCKET NUMBER: 2021-1171-WOC-E; IDENTIFIER: RN103562583; LOCATION: Dallas, Dallas County; TYPE OF FACILITY: operator; RULE VIOLATED: 30 TAC §30.5(a), by failing to obtain a required occupational license; PENALTY: \$175; ENFORCEMENT COORDINATOR: Carlos Molina, (512) 239-2557; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(10) COMPANY: Mansfield Independent School District; DOCKET NUMBER: 2021-0863-MWD-E; IDENTIFIER: RN106313026; LOCATION: Bursleson, Tarrant County; TYPE OF FACILITY: wastewater treatment facility; RULES VIOLATED: 30 TAC §305.125(1), TWC, §26.121(a)(1), and Texas Pollutant Discharge Elimination System Permit Number WQ0013352002, Effluent Limitations and

Monitoring Requirements Number 1, by failing to comply with permitted effluent limitations; PENALTY: \$18,150; ENFORCEMENT COORDINATOR: Harley Hobson, (512) 239-1337; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(11) COMPANY: Mearstone Properties, L.P.; DOCKET NUMBER: 2021-0902-WQ-E; IDENTIFIER: RN111276010; LOCATION: Weatherford, Parker County; TYPE OF FACILITY: operator; RULE VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a construction general permit (stormwater); PENALTY: \$875; ENFORCEMENT COORDINATOR: Alyssa Loveday, (512) 239-5504; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(12) COMPANY: MURPHY OIL USA, INCORPORATED dba Murphy USA 5665 and Murphy USA 6613; DOCKET NUMBER: 2021-0693-PST-E; IDENTIFIERS: RN102258761 and RN102269644; LOCATIONS: Mount Pleasant, Titus County and Henderson, Rusk County; TYPE OF FACILITY: convenience stores with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.72, by failing to report a suspected release to the TCEQ within 24 hours of discovery; and 30 TAC §334.74, by failing to investigate and confirm all suspected releases of regulated substances requiring reporting under 30 TAC §334.72 within 30 days; PENALTY: \$40,301; ENFORCEMENT COORDINATOR: Tyler Richardson, (512) 756-3994; REGIONAL OFFICE: 2916 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

(13) COMPANY: NORTHSIDE, INCORPORATED dba 7-Days Groceries; DOCKET NUMBER: 2021-0713-PST-E; IDENTIFIER: RN102873114; LOCATION: Humble, Harris County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.50(b)(1)(A) and (2) and TWC, §26.3475(c)(1) and (a), by failing to monitor the underground storage tanks (USTs) in a manner which will detect a release at a frequency of at least once every 30 days, and failing to provide release detection for the pressurized piping associated with the UST system; PENALTY: \$3,494; ENFORCEMENT COORDINATOR: Courtney Atkins, (512) 239-1118; REGIONAL OFFICE: 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(14) COMPANY: Port Comfort Power LLC; DOCKET NUMBER: 2021-0839-IWD-E; IDENTIFIER: RN108462102; LOCATION: Point Comfort, Calhoun County; TYPE OF FACILITY: natural gas combustion turbine electric generator facility; RULES VIOLATED: 30 TAC §305.125(1), TWC, §26.121(a)(1), and Texas Pollutant Discharge Elimination System Permit Number WQ0005220000, Effluent Limitations and Monitoring Requirements Number 1, by failing to comply with permitted effluent limitations; PENALTY: \$3,938; ENFORCEMENT COORDINATOR: Stephanie Frederick, (512) 239-1001; REGIONAL OFFICE: 6300 Ocean Drive, Suite 1200, Corpus Christi, Texas 78412-5839, (361) 825-3100.

(15) COMPANY: R & S Stone Incorporated; DOCKET NUMBER: 2021-1026-WQ-E; IDENTIFIER: RN110781994; LOCATION: Lueders, Haskell County; TYPE OF FACILITY: operator; RULE VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a multi-sector general permit (stormwater); PENALTY: \$875; ENFORCEMENT COORDINATOR: Cheryl Thompson, (817) 588-5865; REGIONAL OFFICE: 1977 Industrial Boulevard, Abilene, Texas 79602-7833, (325) 698-9674.

(16) COMPANY: Royal Crest Custom Homes, Ltd.; DOCKET NUMBER: 2021-0815-WQ-E; IDENTIFIER: RN111255246; LOCATION: New Fairview, Wise County; TYPE OF FACILITY: operator; RULE VIOLATED: 30 TAC §281.25(a)(4), by failing to obtain a construction

general permit (stormwater); PENALTY: \$875; ENFORCEMENT COORDINATOR: Ellen Ojeda, (512) 239-2581; REGIONAL OFFICE: 2309 Gravel Drive, Fort Worth, Texas 76118-6951, (817) 588-5800.

(17) COMPANY: TCS #1 MANAGEMENT COMPANY, L.L.C dba Texas Country Store 1; DOCKET NUMBER: 2021-0689-PST-E; IDENTIFIER: RN102791191; LOCATION: Orange, Orange County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULES VIOLATED: 30 TAC §334.48(g)(1)(A)(ii), (B), and (h)(1)(A)(i) and TWC, §26.3475(c)(2), by failing to test the spill prevention equipment at least once every three years to ensure the equipment is liquid tight, failing to inspect the overfill prevention equipment at least once every three years, and failing to inspect the spill prevention equipment at least once every 30 days; and 30 TAC §334.50(b)(1)(A) and TWC, §26.3475(c)(1), by failing to monitor the underground storage tanks in a manner which will detect a release at a frequency of at least once every 30 days; PENALTY: \$4,602; ENFORCEMENT COORDINATOR: Courtney Atkins, (512) 239-1118; REGIONAL OFFICE: 3870 Eastex Freeway, Beaumont, Texas 77703-1830, (409) 898-3838.

(18) COMPANY: Texas A & M University; DOCKET NUMBER: 2021-0624-IWD-E; IDENTIFIER: RN102080348; LOCATION: College Station, Brazos County; TYPE OF FACILITY: steam-electric generating thermal supply unit; RULES VIOLATED: 30 TAC §305.125(1), TWC, §26.121(a)(1), and Texas Pollutant Discharge Elimination System Permit Number WQ0004002000, Effluent Limitations and Monitoring Requirements Number 1, by failing to comply with permitted effluent limitations; PENALTY: \$39,375; ENFORCEMENT COORDINATOR: Harley Hobson, (512) 239-1337; REGIONAL OFFICE: 6801 Sanger Avenue, Suite 2500, Waco, Texas 76710-7826, (254) 751-0335.

(19) COMPANY: THE BAY PLACE PROPERTY OWNERS ASSOCIATION, INCORPORATED; DOCKET NUMBER: 2021-0731-PWS-E; IDENTIFIER: RN101220200; LOCATION: Beach City, Chambers County; TYPE OF FACILITY: public water supply; RULES VIOLATED: 30 TAC §290.115(f)(1) and Texas Health and Safety Code, §341.0315(c), by failing to comply with the maximum contaminant level of 0.080 milligrams per liter for total trihalomethanes, based on the locational running annual average; and 30 TAC §290.117(c)(2)(C), (h), and (i)(1), by failing to collect lead and copper tap samples at the required five sample sites, have the samples analyzed, and report the results to the executive director for the January 1, 2018 - December 31, 2020, monitoring period; PENALTY: \$2,300; ENFORCEMENT COORDINATOR: America Ruiz, (512) 239-2601; REGIONAL OFFICE: 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(20) COMPANY: TRI-CON, INCORPORATED dba Express Mart 27; DOCKET NUMBER: 2021-0690-PST-E; IDENTIFIER: RN101901270; LOCATION: Groves, Jefferson County; TYPE OF FACILITY: convenience store with retail sales of gasoline; RULE VIOLATED: 30 TAC §334.10(b)(2), by failing to assure that all underground storage tank record keeping requirements are met; PENALTY: \$225; ENFORCEMENT COORDINATOR: Stephanie McCurley, (512) 239-2607; REGIONAL OFFICE: 3870 Eastex Freeway, Beaumont, Texas 77703-1830, (409) 898-3838.

TRD-202103841
Charmaine Backens
Deputy Director, Litigation
Texas Commission on Environmental Quality
Filed: September 28, 2021



Amended Notice of Application and Application and Public Hearing for an Air Quality Standard Permit for a Concrete Batch Plant with Enhanced Controls Proposed Air Quality Registration Number 166215

APPLICATION.

Preferred Materials, LLC, 1575 Heritage Drive, Suite 301, McKinney, Texas 75069-3376 has applied to the Texas Commission on Environmental Quality (TCEQ) for an Air Quality Standard Permit for a Concrete Batch Plant with Enhanced Controls Registration Number 166215 to authorize the operation of two permanent concrete batch plants. The facility is proposed to be located at the following driving directions: from the intersection of County Road 412 and County Road 2933, travel east on County Road 412 for 2.49 miles, turn right onto County Road 471 and travel east 740 feet, site is on left, Melissa, Collin County, Texas 75071. This application is being processed in an expedited manner, as allowed by the commission's rules in 30 Texas Administrative Code, Chapter 101, Subchapter J. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application. <http://www.tceq.texas.gov/assets/public/hb610/index.html?lat=33.270278&lng=-96.510667&zoom=13&type=r>. This application was submitted to the TCEQ on August 17, 2021. The primary function of this plant is to manufacture concrete by mixing materials including (but not limited to) sand, aggregate, cement and water. The executive director has determined the application was technically complete on September 13, 2021.

PUBLIC COMMENT / PUBLIC HEARING.

Public written comments about this application may be submitted at any time during the public comment period. The public comment period begins on the first date notice is published and extends to the close of the public hearing. Public comments may be submitted either in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087, or electronically at www14.tceq.texas.gov/epic/eComment/. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record.

A public hearing has been scheduled, that will consist of two parts, an informal discussion period and a formal comment period. During the informal discussion period, the public is encouraged to ask questions of the applicant and TCEQ staff concerning the application, but comments made during the informal period will not be considered by the executive director before reaching a decision on the permit, and no formal response will be made to the informal comments. During the formal comment period, members of the public may state their comments into the official record. **Written comments about this application may also be submitted at any time during the hearing.** The purpose of a public hearing is to provide the opportunity to submit written comments or an oral statement about the application. **The public hearing is not an evidentiary proceeding.**

The Public Hearing is to be held:

Wednesday, November 10, 2021, at 6:00 p.m.

Members of the public who would like to ask questions or provide comments during the hearing may access the hearing via webcast by following this link: <https://www.gotomeeting.com/webinar/join-webinar> and entering Webinar ID 828-621-267. It is recommended that you join the webinar and register for the public hearing at least 15 minutes before the hearing begins. You will be given the option to use your computer audio or to use your phone for participating in the webinar.

Those without internet access must call (512) 239-1201 at least one day prior to the hearing to register for the meeting and to obtain information for participating telephonically. Members of the public who wish to only listen to the hearing may call, toll free, (914) 614-3221 and enter access code 664-503-732.

Additional information will be available on the agency calendar of events at the following link: <https://www.tceq.texas.gov/agency/decisions/hearings/calendar.html>.

RESPONSE TO COMMENTS.

A written response to all formal comments will be prepared by the executive director after the comment period closes. The response, along with the executive director's decision on the application, will be mailed to everyone who submitted public comments and the response to comments will be posted in the permit file for viewing.

The executive director shall approve or deny the application not later than 35 days after the date of the public hearing, considering all comments received within the comment period, and base this decision on whether the application meets the requirements of the standard permit.

CENTRAL/REGIONAL OFFICE.

The application will be available for viewing and copying at the TCEQ Central Office and the TCEQ Dallas/Fort Worth Regional Office, located at 2309 Gravel Dr, Fort Worth, Texas 76118-6951, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, beginning the first day of publication of this notice.

INFORMATION.

If you need more information about this permit application or the permitting process, please call the Public Education Program toll free at (800) 687-4040. Si desea información en español, puede llamar al (800) 687-4040.

Further information may also be obtained from Preferred Materials, LLC, 1575 Heritage Drive, Suite 301, McKinney, Texas 75069-3376, or by calling Ms. Ida Rodriguez, Permit Consultant at (972) 670-2841.

Amended Notice Issuance Date: September 23, 2021

TRD-202103862

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 29, 2021



Enforcement Order

An agreed order was adopted regarding Woodhaven MHC, Ltd., Docket No. 2020-0649-PWS-E on September 28, 2021, assessing \$563 in administrative penalties. Information concerning any aspect of this order may be obtained by contacting Christopher Mullins, Staff Attorney at (512) 239-3400, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.

TRD-202103856

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 29, 2021



Notice of Application and Public Hearing for an Air Quality Standard Permit for a Concrete Batch Plant with Enhanced Controls Proposed Air Quality Registration Number 166475

APPLICATION.

Guadalupe Readymix, LLC, 6600 Highway 27, Comfort, Texas 78013-3391 has applied to the Texas Commission on Environmental Quality (TCEQ) for an Air Quality Standard Permit for a Concrete Batch Plant with Enhanced Controls Registration Number 166475 to authorize the operation of a concrete batch plant with enhanced controls. The facility is proposed to be located on the south side of Farm to Market Road 2252, approximately 1.46 miles east of Farm to Market Road 3009, Garden Ridge, Comal County, Texas 78266. This application is being processed in an expedited manner, as allowed by the commission's rules in 30 Texas Administrative Code, Chapter 101, Subchapter J. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application. <http://www.tceq.texas.gov/assets/public/hb610/index.html?lat=29.63&lng=-98.268611&zoom=13&type=r>. This application was submitted to the TCEQ on September 13, 2021. The primary function of this plant is to manufacture concrete by mixing materials including (but not limited to) sand, aggregate, cement and water. The executive director has determined the application was technically complete on September 23, 2021.

PUBLIC COMMENT / PUBLIC HEARING.

Public written comments about this application may be submitted at any time during the public comment period. The public comment period begins on the first date notice is published and extends to the close of the public hearing. Public comments may be submitted either in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087, or electronically at www14.tceq.texas.gov/epic/eComment/. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record.

A public hearing has been scheduled, that will consist of two parts, an informal discussion period and a formal comment period. During the informal discussion period, the public is encouraged to ask questions of the applicant and TCEQ staff concerning the application, but comments made during the informal period will not be considered by the executive director before reaching a decision on the permit, and no formal response will be made to the informal comments. During the formal comment period, members of the public may state their comments into the official record. **Written comments about this application may also be submitted at any time during the hearing.** The purpose of a public hearing is to provide the opportunity to submit written comments or an oral statement about the application. **The public hearing is not an evidentiary proceeding.**

The Public Hearing is to be held:

Wednesday, November 3, 2021, at 6:00 p.m.

Members of the public who would like to ask questions or provide comments during the hearing may access the hearing via webcast by following this link: <https://www.gotomeeting.com/webinar/join-webinar> and entering Webinar ID 268-773-915. It is recommended that you join the webinar and register for the public hearing at least 15 minutes before the hearing begins. You will be given the option to use your computer audio or to use your phone for participating in the webinar.

Those without internet access must call (512) 239-1201 **at least one day prior** to the hearing to register for the meeting and to obtain in-

formation for participating telephonically. Members of the public who wish to **only listen** to the hearing may call, toll free, (562) 247-8422 and enter access code 435-655-200.

Additional information will be available on the agency calendar of events at the following link: <https://www.tceq.texas.gov/agency/decisions/hearings/calendar.html>.

RESPONSE TO COMMENTS.

A written response to all formal comments will be prepared by the executive director after the comment period closes. The response, along with the executive director's decision on the application, will be mailed to everyone who submitted public comments and the response to comments will be posted in the permit file for viewing.

The executive director shall approve or deny the application not later than 35 days after the date of the public hearing, considering all comments received within the comment period, and base this decision on whether the application meets the requirements of the standard permit.

CENTRAL/REGIONAL OFFICE.

The application will be available for viewing and copying at the TCEQ Central Office and the TCEQ San Antonio Regional Office, located at 14250 Judson Road, San Antonio, Texas 78233-4480, during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, beginning the first day of publication of this notice.

INFORMATION.

If you need more information about this permit application or the permitting process, please call the Public Education Program toll free at (800) 687-4040. Si desea información en español, puede llamar al (800) 687-4040.

Further information may also be obtained from Guadalupe Readymix, LLC, 6600 Highway 27, Comfort, Texas 78013-3391, or by calling Ms. Melissa Fitts, Vice President, Westward Environmental, Inc., at (830) 249-8284.

Notice Issuance Date: September 23, 2021

TRD-202103863

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 29, 2021



Notice of Availability and Request for Public Comment Within 30 Days. Proposed Draft Natural Resource Damage Assessment Plan; Intercontinental Terminals Company, LLC 2019 Deer Park Tank Fire, Harris County, Texas

AGENCIES: Texas Commission on Environmental Quality, Texas General Land Office, Texas Parks and Wildlife Department, National Oceanic and Atmospheric Administration of the United States Department of Commerce, and the United States Fish and Wildlife Service, acting on behalf of the United States Department of the Interior (collectively, the Trustees).

ACTION: Notice of availability of a Draft Natural Resource Damage Assessment Plan, Intercontinental Terminals Company, LLC (ITC) 2019 Deer Park Tank Fire (Draft Assessment Plan) and of a 30-day period for public comment on the Draft Assessment Plan beginning on the date of publication of this notice.

SUMMARY: This notice serves to inform the public that the Trustees have developed a Draft Assessment Plan to describe how the Trustees

propose to determine and quantify natural resource injuries and damages as a result of the release of oil and/or hazardous substances at or from the ITC Deer Park facility.

This opportunity for public review and comment on the Draft Assessment Plan is made pursuant to 43 Code of Federal Regulations (CFR) §11.32(c).

ADDRESSES: Interested members of the public may request a copy of the Draft Assessment Plan by contacting Rita Setser at the Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087; by phone at (512) 239-4848; or by email at rita.setser@tceq.texas.gov.

DATES: Public comments on the Draft Assessment Plan must be submitted in writing to Rita Setser at the same mailing or e-mail address above within 30 days of the publication date of this notice. The Trustees will consider all written comments received during the comment period prior to finalizing the Assessment Plan.

SUPPLEMENTARY INFORMATION: The natural resource damage assessment and restoration (NRDAR) is being conducted jointly by the Trustees pursuant to their respective authorities and responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 United States Code §§9601 to 9675) and other applicable federal and state laws. The Trustees were designated as trustees for natural resources pursuant to §107(f)(2) of CERCLA, 42 U.S.C. §9607(f)(2). Relevant regulations include Subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR §§300.600 through 300.615) and the CERCLA NRDAR regulations at 43 CFR Part 11 (CERCLA NRDAR regulations), which provide guidance for the NRDAR process under CERCLA. Pursuant to 43 CFR Part 11, the Trustees completed a Preassessment Screen and Determination in July 2019, determining that there was sufficient cause to proceed with a NRDAR.

TRD-202103848

Charmaine Backens

Deputy Director, Litigation

Texas Commission on Environmental Quality

Filed: September 28, 2021



Notice of Correction to Agreed Order Number 6

In the September 17, 2021, issue of the *Texas Register* (46 TexReg 6274), the Texas Commission on Environmental Quality (commission) published notice of Agreed Orders, specifically Item Number 6, for CROWN RECYCLING COMPANY, Docket Number 2019-1388-MLM-E. The error is as submitted by the commission.

The reference to the Docket Number should be corrected to read: "2019-1388-WQ-E."

For questions concerning these errors, please contact Michael Parrish at (512) 239-2548.

TRD-202103842

Charmaine Backens

Deputy Director, Litigation

Texas Commission on Environmental Quality

Filed: September 28, 2021



Notice of District Petition

Notice issued September 23, 2021

TCEQ Internal Control No. D-07122021-032; Fulshear Investments, LLC, a Texas limited liability company, Fulshear Equine, LLC, a Texas limited liability company, Mason Equest Investment, LLC, a Texas limited liability company, and Pulte Homes of Texas, L.P., a Texas limited partnership, (Petitioners) filed a petition for creation of Fort Bend County Municipal Utility District No. 245 (District) with the Texas Commission on Environmental Quality (TCEQ). The petition was filed pursuant to Article XVI, §59 of the Constitution of the State of Texas; Chapters 49 and 54 of the Texas Water Code; 30 Texas Administrative Code Chapter 293; and the procedural rules of the TCEQ.

The petition states that: (1) the Petitioners hold title to a majority in value of the land to be included in the proposed District; (2) there is a lienholder on the property to be included in the proposed District, and the lienholder consents to the creation of the proposed District; (3) the proposed District will contain approximately 229.142 acres located within Fort Bend County, Texas; and (4) all of the land within the proposed District is within the extraterritorial jurisdiction of the City of Fulshear, Texas, and the Petitioners have represented that the City of Fulshear, Texas, will annex the land into its corporate boundaries. By Resolution No. 2021-503, passed, approved, and adopted on January 19, 2021, the City of Fulshear, Texas, gave its consent to the creation of the proposed District, pursuant to Texas Water Code §54.016. The petition further states that the proposed District will: (1) purchase, design, construct, acquire, maintain, own, operate, repair, improve and extend a waterworks and sanitary sewer system for residential and commercial purposes; (2) construct, acquire, improve, extend, maintain and operate works, improvements, facilities, plants, equipment, and appliances helpful or necessary to provide more adequate drainage for the proposed District; (3) control, abate, and amend local storm waters or other harmful excesses of water; and (4) purchase, construct, acquire, maintain, own, operate, repair, improve, and extend such additional facilities, including roads, parks and recreation facilities, systems, plants, and enterprises as shall be consonant with all of the purposes for which the proposed District is created. According to the petition, a preliminary investigation has been made to determine the cost of the project, and it is estimated by the Petitioners that the cost of said project will be approximately \$50,170,000 (\$34,100,000 for water, wastewater, and drainage plus \$2,470,000 for recreation plus \$13,600,000 for roads).

INFORMATION SECTION

To view the complete issued notice, view the notice on our website at www.tceq.texas.gov/agency/cc/pub_notice.html or call the Office of the Chief Clerk at (512) 239-3300 to obtain a copy of the complete notice. When searching the website, type in the issued date range shown at the top of this document to obtain search results.

The TCEQ may grant a contested case hearing on the petition if a written hearing request is filed within 30 days after the newspaper publication of the notice. To request a contested case hearing, you must submit the following: (1) your name (or for a group or association, an official representative), mailing address, daytime phone number, and fax number, if any; (2) the name of the Petitioner and the TCEQ Internal Control Number; (3) the statement "I/we request a contested case hearing"; (4) a brief description of how you would be affected by the petition in a way not common to the general public; and (5) the location of your property relative to the proposed District's boundaries. You may also submit your proposed adjustments to the petition. Requests for a contested case hearing must be submitted in writing to the Office of the Chief Clerk at the address provided in the information section below. The Executive Director may approve the petition unless a written request for a contested case hearing is filed within 30 days after the newspaper publication of this notice. If a hearing request is filed, the Executive Director will not approve the petition and will forward the petition and hearing request to the TCEQ Commis-

sioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court. Written hearing requests should be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address. For additional information, individual members of the general public may contact the Districts Review Team, at (512) 239-4691. Si desea información en español, puede llamar al (512) 239-0200. General information regarding TCEQ can be found at our website at www.tceq.texas.gov.

TRD-202103745

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 23, 2021



Notice of District Petition

Notice Issued September 29, 2021

TCEQ Internal Control No. D-08192021-030; Clayton Properties Group Inc., a Tennessee corporation doing business in Texas as Brohn Homes and S&H Hutto Investments, LLC, a Texas limited liability company, (Petitioners) filed a petition for creation of Williamson County Municipal Utility District No. 35 (District) with the Texas Commission on Environmental Quality (TCEQ). The petition was filed pursuant to Article XVI, §59 of the Constitution of the State of Texas; Chapters 49 and 54 of the Texas Water Code; 30 Texas Administrative Code Chapter 293; and the procedural rules of the TCEQ. The petition states that: (1) the Petitioners hold title to a majority in value of the land to be included in the proposed District; (2) there are no lienholders on the property to be included in the proposed District; (3) the proposed District will contain approximately 299.173 acres located within Williamson County, Texas; and (4) all of the land within the proposed District is within the extraterritorial jurisdiction of the City of Hutto. By Resolution No. R-2021-040, passed and adopted on March 16, 2021, the City of Hutto, Texas, gave its consent to the creation of the proposed District, pursuant to Texas Water Code §54.016. The petition further states that the proposed District will: (1) design, construct, acquire, improve, extend, finance, issue bonds, maintain, operate, and convey an adequate and efficient water works and sanitary sewer system for domestic and commercial purposes; (2) design, construct, acquire, improve, extend, finance, issue bonds, maintain, operate, and convey works, improvements, facilities, plants, equipment, and appliances helpful or necessary to provide more adequate drainage for the proposed District; (3) control, abate, and amend local storm waters or other harmful excesses of water; (4) design, construct, acquire, improve, extend, finance, issue bonds, maintain, operate, and convey park and recreational facilities; and (5) design, construct, acquire, improve, extend, finance, issue bonds, maintain, operate, and convey such other additional facilities, systems, plants, and enterprises as shall be consonant with all of the purposes for which the proposed District is created.

According to the petition, a preliminary investigation has been made to determine the cost of the project, and it is estimated by the Petitioners that the cost of said project will be approximately \$26,100,000 (\$24,600,000 for water, wastewater, and drainage plus \$1,500,000 for recreation).

INFORMATION SECTION

To view the complete issued notice, view the notice on our website at www.tceq.texas.gov/agency/cc/pub_notice.html or call the Office of

the Chief Clerk at (512) 239-3300 to obtain a copy of the complete notice. When searching the website, type in the issued date range shown at the top of this document to obtain search results.

The TCEQ may grant a contested case hearing on the petition if a written hearing request is filed within 30 days after the newspaper publication of the notice. To request a contested case hearing, you must submit the following: (1) your name (or for a group or association, an official representative), mailing address, daytime phone number, and fax number, if any; (2) the name of the Petitioner and the TCEQ Internal Control Number; (3) the statement "I/we request a contested case hearing"; (4) a brief description of how you would be affected by the petition in a way not common to the general public; and (5) the location of your property relative to the proposed District's boundaries. You may also submit your proposed adjustments to the petition. Requests for a contested case hearing must be submitted in writing to the Office of the Chief Clerk at the address provided in the information section below. The Executive Director may approve the petition unless a written request for a contested case hearing is filed within 30 days after the newspaper publication of this notice. If a hearing request is filed, the Executive Director will not approve the petition and will forward the petition and hearing request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court. Written hearing requests should be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. For information concerning the hearing process, please contact the Public Interest Counsel, MC 103, at the same address. For additional information, individual members of the general public may contact the Districts Review Team, at (512) 239-4691. Si desea información en español, puede llamar al (512) 239-0200. General information regarding TCEQ can be found at our website at www.tceq.texas.gov.

TRD-202103861

Laurie Gharis
Chief Clerk

Texas Commission on Environmental Quality
Filed: September 29, 2021



Notice of Hearing MARBAC, L.L.C. SOAH Docket No.
582-21-2735 TCEQ Docket No. 2021-0438-MWD Permit No.
WQ0015880001

APPLICATION.

Marbac, L.L.C., 9803 Highway 242, Suite 200-134, Conroe, Texas 77385, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015880001, to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 99,000 gallons per day. TCEQ received this application on April 6, 2020.

The facility will be located at 17431 Farm-to-Market Road 1314, in Montgomery County, Texas 77302. The treated effluent will be discharged to a man-made channel; thence to an unnamed tributary; thence to West Fork San Jacinto River in Segment No. 1004 of the San Jacinto River Basin. The unclassified receiving water use is minimal aquatic life use for the man-made channel. The designated uses for Segment No. 1004 are primary contact recreation, public water supply, and high aquatic life use. In accordance with 30 Texas Administrative Code §307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed.

A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. This review has preliminarily determined that no water bodies with exceptional, high, or intermediate aquatic life uses are present within the stream reach assessed; therefore, no Tier 2 degradation determination is required. No significant degradation of water quality is expected in water bodies with exceptional, high, or intermediate aquatic life uses downstream, and existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. As a public courtesy, we have provided the following Web page to an online map of the site or the facility's general location. The online map is not part of the application or the notice: <https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-95.34147%2C30.198416&level=12>. For the exact location, refer to the application.

The TCEQ Executive Director has prepared a draft permit which, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Montgomery County Clerk, 210 West Davis Street, Suite 100, Conroe, Texas.

CONTESTED CASE HEARING.

Considering directives to protect public health, the State Office of Administrative Hearings (SOAH) will conduct a preliminary hearing via Zoom videoconference. A Zoom meeting is a secure, free meeting held over the internet that allows video, audio, or audio/video conferencing.

10:00 a.m. - November 22, 2021

To join the Zoom meeting via computer:

<https://soah-texas.zoomgov.com/>

Meeting ID: 161 803 1228

Password: TPDES1

or

To join the Zoom meeting via telephone:

(669) 254-5252 or (646) 828-7666

Meeting ID: 161 803 1228

Password: 440494

Visit the SOAH website for registration at: <http://www.soah.texas.gov/>

or call SOAH at (512) 475-4993.

The purpose of a preliminary hearing is to establish jurisdiction, name the parties, establish a procedural schedule for the remainder of the proceeding, and to address other matters as determined by the judge. The evidentiary hearing phase of the proceeding, which will occur at a later date, will be similar to a civil trial in state district court. The hearing will address the disputed issues of fact identified in the TCEQ order concerning this application issued on May 26, 2021. In addition to these issues, the judge may consider additional issues if certain factors are met.

The hearing will be conducted in accordance with Chapter 2001, Texas Government Code; Chapter 26, Texas Water Code; and the procedural rules of the TCEQ and SOAH, including 30 Texas Administrative Code Chapter 80 and 1 Texas Administrative Code Chapter 155. The hearing

will be held unless all timely hearing requests have been withdrawn or denied.

To request to be a party, you must attend the hearing and show you would be adversely affected by the application in a way not common to members of the general public. Any person may attend the hearing and request to be a party. Only persons named as parties may participate at the hearing.

In accordance with 1 Texas Administrative Code §155.401(a), Notice of Hearing, "Parties that are not represented by an attorney may obtain information regarding contested case hearings on the public website of the State Office of Administrative Hearings at www.soah.texas.gov, or in printed format upon request to SOAH."

INFORMATION.

If you need more information about the hearing process for this application, please call the Public Education Program, toll free, at (800) 687-4040. General information about the TCEQ can be found at our web site at www.tceq.texas.gov.

Further information may also be obtained from Marbac, L.L.C. at the address stated above or by calling Mr. Justin Baca at (713) 992-2907.

Persons with disabilities who need special accommodations at the hearing should call the SOAH Docketing Department at (512) 475-4993, at least one week prior to the hearing.

Issued: September 28, 2021

TRD-202103859

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 29, 2021



Notice of Hearing on Denton County Municipal Utility District No. 10: SOAH Docket No. 582-21-2602; TCEQ Docket No. 2020-1310-MWD; Permit No. WQ0015803001

APPLICATION.

Denton County Municipal Utility District No. 10, c/o Julianne Kugle, Josh Kahn, and Judy Marcantel Sanford Kuhl Hagan Kugle Parker Kahn, LLP, 1980 Post Oak Boulevard, Suite 1380, Houston, Texas 77056, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0015803001, to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 120,000 gallons per day. TCEQ received this application on June 4, 2019.

The facility will be located approximately 400 feet north and 400 feet west of the northwest corner of the intersection of Boss Range Road and Sam Reynolds Road, in Denton County, Texas 76247. The treated effluent will be discharged to Catherine Branch, thence to Denton Creek, thence to Grapevine Lake in Segment No. 0826 of the Trinity River Basin. The unclassified receiving water uses are minimal aquatic life use for Catherine Branch above unnamed tributary and high aquatic life use for Catherine Branch below unnamed tributary. The designated uses for Segment No. 0826 are primary contact recreation, public water supply, and high aquatic life use. In accordance with 30 Texas Administrative Code (TAC) §307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be

impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Catherine Branch below unnamed tributary, which has been identified as having high aquatic life uses. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received. As a public courtesy, we have provided the following Web page to an online map of the site or the facility's general location. The online map is not part of the application or the notice: <https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bb-ddd360f8168250f&marker=-97.309905%2C33.054827&level=12>. For the exact location, refer to the application.

The TCEQ Executive Director has prepared a draft permit which, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at the Justin Community Library, in the Coffee Bar on the community board, 408 Pafford Avenue, Justin, Texas.

CONTESTED CASE HEARING.

Considering directives to protect public health, the State Office of Administrative Hearings (SOAH) will conduct a preliminary hearing via Zoom videoconference. A Zoom meeting is a secure, free meeting held over the internet that allows video, audio, or audio/video conferencing.

10:00 a.m. - November 2, 2021

To join the Zoom meeting via computer:

<https://soah-texas.zoomgov.com/>

Meeting ID: 161 664 7225

Password: gtv4R7

or

To join the Zoom meeting via telephone:

(669) 254-5252 or (646) 828-7666

Meeting ID: 161 664 7225

Password: 866413

Visit the SOAH website for registration at: <http://www.soah.texas.gov/>

or call SOAH at (512) 475-4993.

The purpose of a preliminary hearing is to establish jurisdiction, name the parties, establish a procedural schedule for the remainder of the proceeding, and to address other matters as determined by the judge. The evidentiary hearing phase of the proceeding, which will occur at a later date, will be similar to a civil trial in state district court. The hearing will address the disputed issues of fact identified in the TCEQ order concerning this application issued on May 7, 2021. In addition to these issues, the judge may consider additional issues if certain factors are met.

The hearing will be conducted in accordance with Chapter 2001, Texas Government Code; Chapter 26, Texas Water Code; and the procedural rules of the TCEQ and SOAH, including 30 TAC Chapter 80 and 1 TAC Chapter 155. The hearing will be held unless all timely hearing requests have been withdrawn or denied.

To request to be a party, you must attend the hearing and show you would be adversely affected by the application in a way not common to

members of the general public. Any person may attend the hearing and request to be a party. Only persons named as parties may participate at the hearing.

In accordance with 1 Texas Administrative Code §155.401(a), Notice of Hearing, "Parties that are not represented by an attorney may obtain information regarding contested case hearings on the public website of the State Office of Administrative Hearings at www.soah.texas.gov, or in printed format upon request to SOAH."

INFORMATION.

If you need more information about the hearing process for this application, please call the Public Education Program, toll free, at (800) 687-4040. General information about the TCEQ can be found at our website at www.tceq.texas.gov.

Further information may also be obtained from Denton County Municipal Utility District No. 10 at the address stated above or by calling Ms. Karena Hauter, P.E., Project Manager, BGE, Inc., at (713) 488-8269.

Persons with disabilities who need special accommodations at the hearing should call the SOAH Docketing Department at (512) 475-4993, at least one week prior to the hearing.

Issued: September 17, 2021

TRD-202103791

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 24, 2021



Notice of Hearing Port Arthur LNG, LLC SOAH Docket No. 582-22-0201 TCEQ Docket No. 2021-0942-AIR Proposed Permit Nos. 158420, PSDTX1572, and GHGPSDTX198

PM_{2.5}

Maximum Averaging Time	Maximum Increment Consumed (µg/m ³)	Allowable Increment (µg/m ³)
24-hour	8.8	9

The Executive Director has determined that the emissions of air contaminants from the proposed facility which are subject to PSD review will not violate any state or federal air quality regulations and will not have any significant adverse impact on soils, vegetation, or visibility. All air contaminants have been evaluated, and "best available control technology" will be used for the control of these contaminants.

The TCEQ Executive Director has prepared a draft permit which, if approved, would establish the conditions under which the facility must operate. The permit application, executive director's preliminary decision, draft permit, and the executive director's preliminary determination summary and executive director's air quality analysis, are available for viewing and copying at the TCEQ central office, the TCEQ Beaumont regional office, and at the Effie & Wilton Hebert Public Library, 2025 Merriman Street, Port Neches, Jefferson County, Texas. The facility's compliance file, if any exists, is available for public review at the TCEQ Beaumont Regional Office, 3870 Eastex Freeway, Beaumont, Texas.

CONTESTED CASE HEARING.

APPLICATION.

Port Arthur LNG, LLC, 2925 Briarpark Drive Suite 900, Houston, Texas 77042-3781, has applied to the Texas Commission on Environmental Quality (TCEQ) for issuance of Proposed Air Quality Permit 158420, Prevention of Significant Deterioration (PSD) Air Quality Permit PSDTX1572, and Greenhouse Gas Prevention of Significant Deterioration (GHGPSD) Air Quality Permit GHGPSDTX198, which would authorize construction of the Port Arthur LNG, located from the intersection of Texas 82 and Texas 87 in Port Arthur, travel south on Texas 87 for 5.3 miles to oil field road, turn right and Port Arthur LNG is on the left, Port Arthur, Jefferson County, Texas 77642. As a public courtesy, we have provided the following Web page to an online map of the site or the facility's general location. The online map is not part of the application or the notice: <https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-93.948888%2C29.785277&level=12>.

For the exact location, refer to the application. This application was processed in an expedited manner, as allowed by the commission's rules in 30 Texas Administrative Code (TAC), Chapter 101, Subchapter J. This application was submitted to the TCEQ on September 12, 2019. The proposed facility will emit the following air contaminants in a significant amount: carbon monoxide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and particulate matter with diameters of 2.5 microns or less, sulfur dioxide, sulfuric acid mist, and greenhouse gases. In addition, the facility will emit the following air contaminants: ammonia.

The degree of PSD increment predicted to be consumed by the proposed facility and other increment-consuming sources in the area is as follows:

Considering directives to protect public health, the State Office of Administrative Hearings (SOAH) will conduct a preliminary hearing via Zoom videoconference. A Zoom meeting is a secure, free meeting held over the internet that allows video, audio, or audio/video conferencing.

10:00 a.m. - November 16, 2021

To join the Zoom meeting via computer:

<https://soah-texas.zoomgov.com/>

Meeting ID: 161 566 5456

Password: TCEQ0201

or

To join the Zoom meeting via telephone:

(669) 254-5252 or (646) 828-7666

Meeting ID: 161 566 5456

Password: 53661104

Visit the SOAH website for registration at: <http://www.soah.texas.gov/>

or call SOAH at 512-475-4993.

The purpose of a preliminary hearing is to establish jurisdiction, name the parties, establish a procedural schedule for the remainder of the proceeding, and to address other matters as determined by the judge. The evidentiary hearing phase of the proceeding, which will occur at a later date, will be similar to a civil trial in state district court. The hearing will address the disputed issues of fact identified in the TCEQ order concerning this application issued on September 2, 2021. In addition to these issues, the judge may consider additional issues if certain factors are met.

The hearing will be conducted in accordance with the Chapter 2001, Texas Government Code; Chapter 382, Texas Health and Safety Code; TCEQ rules including 30 Texas Administrative Code Chapter 116, Subchapters A and B; and the procedural rules of the TCEQ and SOAH, including 30 Texas Administrative Code Chapter 80 and 1 Texas Administrative Code Chapter 155. The hearing will be held unless all timely hearing requests have been withdrawn or denied.

To request to be a party, you must attend the hearing and show you would be affected by the application in a way not common to the general public. Any person may attend the hearing and request to be a party. Only persons named as parties may participate at the hearing.

MAILING LIST. You may ask to be placed on a mailing list to obtain additional information on this application by sending a request to the Office of the Chief Clerk at the address below.

AGENCY CONTACTS AND INFORMATION. Public comments and requests must be submitted either electronically at www.tceq.texas.gov/agency/decisions/cc/comments.html, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. If you communicate with the TCEQ electronically, please be aware that your email address, like your physical mailing address, will become part of the agency's public record. For more information about this permit application, the permitting process, or the contested case hearing process, please call the Public Education Program toll free at (800) 687-4040. Si desea información en español, puede llamar al (800) 687-4040. General information regarding the TCEQ may be obtained electronically at www.tceq.texas.gov

In accordance with 1 Texas Administrative Code §155.401(a), Notice of Hearing, "Parties that are not represented by an attorney may obtain information regarding contested case hearings on the public website of the State Office of Administrative Hearings at www.soah.texas.gov, or in printed format upon request to SOAH."

INFORMATION.

If you need more information about the hearing process for this application, please call the Public Education Program, toll free, at (800) 687-4040. General information regarding the TCEQ can be found at www.tceq.texas.gov.

Persons with disabilities who need special accommodations at the hearing should call the SOAH Docketing Department at (512) 475-4993, at least one week prior to the hearing.

Further information may also be obtained from Port Arthur LNG, LLC at the address stated above or by calling Mr. Kerry Higgins, Vice President Technical Services, The WCM Group, Inc. at (281) 446-7070.

Issued: September 27, 2021

TRD-202103857

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 29, 2021



Notice of Opportunity to Comment on Default Orders of Administrative Enforcement Actions

The Texas Commission on Environmental Quality (TCEQ or commission) staff is providing an opportunity for written public comment on the listed Default Orders (DOs). The commission staff proposes a DO when the staff has sent the Executive Director's Preliminary Report and Petition (EDPRP) to an entity outlining the alleged violations; the proposed penalty; the proposed technical requirements necessary to bring the entity back into compliance; and the entity fails to request a hearing on the matter within 20 days of its receipt of the EDPRP or requests a hearing and fails to participate at the hearing. Similar to the procedure followed with respect to Agreed Orders entered into by the executive director of the commission, in accordance with Texas Water Code (TWC), §7.075, this notice of the proposed order and the opportunity to comment is published in the *Texas Register* no later than the 30th day before the date on which the public comment period closes, which in this case is **November 8, 2021**. The commission will consider any written comments received, and the commission may withdraw or withhold approval of a DO if a comment discloses facts or considerations that indicate that consent to the proposed DO is inappropriate, improper, inadequate, or inconsistent with the requirements of the statutes and rules within the commission's jurisdiction, or the commission's orders and permits issued in accordance with the commission's regulatory authority. Additional notice of changes to a proposed DO is not required to be published if those changes are made in response to written comments.

A copy of each proposed DO is available for public inspection at both the commission's central office, located at 12100 Park 35 Circle, Building A, 3rd Floor, Austin, Texas 78753, (512) 239-3400 and at the applicable regional office listed as follows. Written comments about the DO should be sent to the attorney designated for the DO at the commission's central office at P.O. Box 13087, MC 175, Austin, Texas 78711-3087 and must be **received by 5:00 p.m. on November 8, 2021**. Comments may also be sent by facsimile machine to the attorney at (512) 239-3434. The commission's attorneys are available to discuss the DOs and/or the comment procedure at the listed phone numbers; however, TWC, §7.075, provides that comments on the DOs shall be submitted to the commission in **writing**.

(1) COMPANY: Dario Jaime Gonzalez; DOCKET NUMBER: 2019-1085-MSW-E; TCEQ ID NUMBER: RN110811296; LOCATION: approximately 600 feet north of the intersection of Davis Road and North Val Verde Road, Hidalgo County; TYPE OF FACILITY: municipal solid waste (MSW) site; RULE VIOLATED: 30 TAC §330.15(a) and (c), by causing, suffering, allowing, or permitting the unauthorized disposal of MSW; PENALTY: \$22,500; STAFF ATTORNEY: Roslyn Dubberstein, Litigation, MC 175, (512) 239-0683; REGIONAL OFFICE: Harlingen Regional Office, 1804 West Jefferson Avenue, Harlingen, Texas 78550-5247, (956) 425-6010.

(2) COMPANY: ELARA HOMES INC; DOCKET NUMBER: 2020-1087-WQ-E; TCEQ ID NUMBER: RN107948721; LOCATION: five miles west of Interstate 45 on Farm-to-Market 1374, Huntsville, Walker County; TYPE OF FACILITY: homebuilding construction site; RULES VIOLATED: 30 TAC §305.125(1) and Texas Pollutant Discharge Elimination System (TPDES) General Permit Number TXR15557A, Part III, Sections E.2 and F.1(g)(vi), by failing to maintain a complete Stormwater Pollution Prevention Plan; and 30

TAC §305.125(1) and TPDES General Permit Number TXR15557A, Part III, Sections D.1 and F.7(a) - (c), and (e) and (f); PENALTY: \$2,856; STAFF ATTORNEY: Judy Bohr, Litigation, MC 175, (512) 239-5807; REGIONAL OFFICE: Houston Regional Office, 5425 Polk Street, Suite H, Houston, Texas 77023-1452, (713) 767-3500.

(3) COMPANY: Kenneth J. Fiengo dba K & K Industrial Coatings; DOCKET NUMBER: 2019-1603-AIR-E; TCEQ ID NUMBER: RN110601507; LOCATION: 1114 West Harrison Road, Longview, Gregg County; TYPE OF FACILITY: sandblasting and painting business; RULES VIOLATED: Texas Health and Safety Code §382.0518(a) and §382.085(b), and 30 TAC §116.110(a), by failing to obtain authorization prior to constructing or modifying a source of air contaminants; PENALTY: \$1,312; STAFF ATTORNEY: Christopher Mullins, Litigation, MC 175, (512) 239-0141; REGIONAL OFFICE: Tyler Regional Office, 2916 Teague Drive, Tyler, Texas 75701-3734, (903) 535-5100.

TRD-202103840

Charmaine Backens

Deputy Director, Litigation

Texas Commission on Environmental Quality

Filed: September 28, 2021



Notice of Public Hearing on Assessment of Administrative Penalties and Requiring Certain Actions of Jeval Ventures, Inc. dba Maaco Collision Repair & Auto Painting SOAH Docket No. 582-22-0131 TCEQ Docket No. 2019-1607-AIR-E

The Texas Commission on Environmental Quality (TCEQ or the Commission) has referred this matter to the State Office of Administrative Hearings (SOAH). An Administrative Law Judge with the State Office of Administrative Hearings will conduct a public hearing via Zoom videoconference at:

10:00 a.m. - October 28, 2021

To join the Zoom meeting via computer:

<https://soah-texas.zoomgov.com/>

Meeting ID: 161 639 3156

Password: Q1HxCv

or

To join the Zoom meeting via telephone dial:

+1 (669) 254-5252 or (646) 828-7666

Meeting ID: 161 639 3156

Password: 740837

The purpose of the hearing will be to consider the Executive Director's Preliminary Report and Petition mailed January 21, 2021, concerning assessing administrative penalties against and requiring certain actions of Jeval Ventures, Inc. dba Maaco Collision Repair & Auto Painting, for violations in Fort Bend County, Texas, of: Texas Health & Safety Code §382.085(b), 30 Texas Administrative Code §§106.436(3), (9)(B) and (C), and (16)(B), (D), and (E), and 106.8(c)(1) and (c)(2)(B), and Permit by Rule ("PBR") Registration No. 147498.

The hearing will allow Jeval Ventures, Inc. dba Maaco Collision Repair & Auto Painting, the Executive Director, and the Commission's Public Interest Counsel to present evidence on whether a violation has occurred, whether an administrative penalty should be assessed, and the amount of such penalty, if any. The first convened session of the hearing will be to establish jurisdiction, afford Jeval Ventures, Inc. dba

Maaco Collision Repair & Auto Painting, the Executive Director of the Commission, and the Commission's Public Interest Counsel an opportunity to negotiate and to establish a discovery and procedural schedule for an evidentiary hearing. Unless agreed to by all parties in attendance at the preliminary hearing, an evidentiary hearing will not be held on the date of this preliminary hearing. **Upon failure of Jeval Ventures, Inc. dba Maaco Collision Repair & Auto Painting to appear at the preliminary hearing or evidentiary hearing, the factual allegations in the notice will be deemed admitted as true, and the relief sought in the notice of hearing may be granted by default. The specific allegations included in the notice are those set forth in the Executive Director's Preliminary Report and Petition, attached hereto and incorporated herein for all purposes.** Jeval Ventures, Inc. dba Maaco Collision Repair & Auto Painting, the Executive Director of the Commission, and the Commission's Public Interest Counsel are the only designated parties to this proceeding.

Legal Authority: Texas Water Code §7.054 and ch. 7, Texas Health & Safety Code ch. 382 and 30 Texas Administrative Code chs. 70 and 106; Texas Water Code §7.058, and the Rules of Procedure of the Texas Commission on Environmental Quality and the State Office of Administrative Hearings, including 30 Texas Administrative Code §70.108 and §70.109 and ch. 80, and 1 Texas Administrative Code ch. 155.

Further information regarding this hearing may be obtained by contacting Elizabeth Lieberknecht, Staff Attorney, Texas Commission on Environmental Quality, Litigation Division, Mail Code 175, P.O. Box 13087, Austin, Texas 78711-3087, telephone (512) 239-3400. Information concerning your participation in this hearing may be obtained by contacting Vic McWherter, Public Interest Counsel, Mail Code 103, at the same P.O. Box address given above, or by telephone at (512) 239-6363.

Any document filed prior to the hearing must be filed with TCEQ's Office of the Chief Clerk and SOAH. Documents filed with the Office of the Chief Clerk may be filed electronically at www.tceq.texas.gov/goto/efilings or sent to the following address: TCEQ Office of the Chief Clerk, Mail Code 105, P.O. Box 13087, Austin, Texas 78711-3087. Documents filed with SOAH may be filed via fax at (512) 322-2061 or sent to the following address: SOAH, 300 West 15th Street, Suite 504, Austin, Texas 78701. When contacting the Commission or SOAH regarding this matter, reference the SOAH docket number given at the top of this notice.

In accordance with 1 Texas Administrative Code §155.401(a), Notice of Hearing, "Parties that are not represented by an attorney may obtain information regarding contested case hearings on the public website of the State Office of Administrative Hearings at www.soah.texas.gov, or in printed format upon request to SOAH."

Persons who need special accommodations at the hearing should call the SOAH Docketing Department at (512) 475-3445, at least one week before the hearing.

Issued: September 28, 2021

TRD-202103860

Laurie Gharis

Chief Clerk

Texas Commission on Environmental Quality

Filed: September 29, 2021



Notice of Public Hearing on Proposed Revisions to 30 TAC Chapters 305, 308, 314, and 315

The Texas Commission on Environmental Quality (commission) will conduct a public hearing to receive testimony regarding proposed

repeal of §§308.1, 308.21, 308.31, 308.41, 308.71, 308.81, 308.91, 308.101, and 308.141 of 30 TAC Chapter 308, Criteria and Standards for the National Pollutant Discharge Elimination System; §314.1 of 30 TAC Chapter 314, Toxic Pollutant Effluent Standards; and §315.1 of 30 TAC Chapter 315, Pretreatment Regulations for Existing and New Sources of Pollution; and proposed new §§305.542-305.544 of 30 TAC Chapter 305, Consolidated Permits, under the requirements of Texas Government Code, Chapter 2001, Subchapter B.

The proposed rulemaking is the result of the 2019 quadrennial rule reviews of these chapters. The proposed rulemaking would repeal and re-propose these rules within Chapter 305, Subchapter P, with the exception of Chapter 308, Subchapters C and J which have been determined as obsolete. The proposed rulemaking would also adopt by reference 40 Code of Federal Regulations Part 125, Subpart N.

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on Tuesday, November 9, 2021, at 10:00 a.m. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by **Monday, November 8, 2021**. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on **Monday, November 8, 2021**, to those who register for the hearing.

For the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YTRIM-mM0YjEtMzcyNy00MjMyLTk0MGQlZDc0ODAlNDlmMWZl%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%2230ec010b-ff0b-4618-bbc4-622a14f9cb18%22%2c%22IsBroadcastMeeting%22%3atrue%7d

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RE-LAY-TX (TDD). Requests should be made as far in advance as possible.

Written Comments

Written comments may be submitted to Cecilia Mena, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restrictions may apply to comments being submitted via the *eComments* system. All comments should reference Rule Project Number 2021-020-305-OW. The comment period closes November 9, 2021. Please choose one of the methods provided to submit your *written* comments.

Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html.

For further information, please contact Laurie Fleet, Water Quality Division, (512) 239-5445.

TRD-202103785

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Filed: September 24, 2021



Notice of Public Hearing on Proposed Revisions to 30 TAC Chapters 321 and 351

The Texas Commission on Environmental Quality (commission) will conduct a public hearing to receive testimony regarding proposed repeal of 30 Texas Administrative Code (TAC) Chapter 321, Control of Certain Activities by Rule, §§321.71 - 321.81, 321.91 - 321.97, and 321.211 - 321.220, and 30 TAC Chapter 351, Regionalization, §§351.41 - 351.45, under the requirements of Texas Government Code, Chapter 2001, Subchapter B.

The proposed rulemaking would repeal rules determined to be obsolete as a result of the Quadrennial Reviews of Chapters 321 and 351 (Non-Rule Project Numbers 2019-029-351-OW and 2019-033-321-OW).

Virtual Public Hearing

The commission will hold a virtual public hearing on this proposal on **November 9, 2021, at 2:00 p.m.** The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the virtual hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Registration

The hearing will be conducted remotely using an internet meeting service. Individuals who plan to attend the hearing and want to provide oral comments and/or want their attendance on record must register by **November 5, 2021**. To register for the hearing, please email Rules@tceq.texas.gov and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on **November 8, 2021**, to those who register for the hearing.

Members of the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDEx-OTI0ZDAtMGQ3NC00ZDIzLTkwMzUtMTcyYzkyNDc1ODAz%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%22bf237360-1655-4724-96f6-ba9493e841ba%22%2c%22IsBroadcastMeeting%22%3atrue%7d

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RE-LAY-TX (TDD). Requests should be made as far in advance as possible.

Written Comments

Written comments may be submitted to Ms. Lee Bellware, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to fax4808@tceq.texas.gov. Electronic comments may be submitted at: <https://www6.tceq.texas.gov/rules/ecomments/>. File size restric-

tions may apply to comments being submitted via the *eComments* system. All comments should reference Rule Project Number 2021-022-321-OW. The comment period closes November 9, 2021. Please choose one of the methods provided to submit your *written* comments.

Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Laurie Fleet, Water Quality Administration Unit, (512) 239-5445.

TRD-202103786

Guy Henry

Deputy Director, Environmental Law Division

Texas Commission on Environmental Quality

Filed: September 24, 2021



General Land Office

Notice and Opportunity to Comment on Requests for Consistency Agreement/Concurrence Under the Texas Coastal Management Program

On January 10, 1997, the State of Texas received federal approval of the Coastal Management Program (CMP) (62 *Federal Register* pp. 1439 - 1440). Under federal law, federal agency activities and actions affecting the Texas coastal zone must be consistent with the CMP goals and policies identified in 31 TAC Chapter 501. Requests for federal consistency review were deemed administratively complete for the following project(s) during the period of September 13, 2021 to September 24, 2021. As required by federal law, the public is given an opportunity to comment on the consistency of proposed activities in the coastal zone undertaken or authorized by federal agencies. Pursuant to 31 TAC §§506.25, 506.32, and 506.41, the public comment period extends 30 days from the date published on the Texas General Land Office web site. The notice was published on the web site on Friday, October 1, 2021. The public comment period for this project will close at 5:00 p.m. on Sunday, October 31, 2021.

FEDERAL AGENCY ACTIONS:

Applicant: David L. Ezzell

Location: The project site is located in Gator Point Canal, at 1115 Gator Point, in Crystal Beach, Galveston County, Texas.

Latitude & Longitude (NAD 83): 29.451737, -94.671894

Project Description: The is an After-the-Fact permit application request. The applicant proposes to retain unauthorized discharges of dredged and fill material into jurisdictional waters of the U.S. for the purposes of commercial development and erosion shoreline protection. Such activities included the use of a backhoe to dredge a 0.27-acre area of open tidal canal and discharging 165 cubic yards of dredged material into 0.10-acre of open tidal water, and 1,480 cubic yards of dredged material into 0.97-acre of tidal wetlands, and installation of 400-linear-foot vinyl bulkhead.

Type of Application: U.S. Army Corps of Engineers permit application # SWG-2019-00450. This application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Note: The consistency review for this project may be conducted by the Texas Commission on Environmental Quality as part of its certification under §401 of the Clean Water Act.

CMP Project No: 22-1003-F1

Applicant: City of Portland, Texas

Location: The project site is located adjacent to the existing parking lot at Indian Point Park south of TX-35 N/US-181 N and along the northern shoreline of Corpus Christi Bay, San Patricio County, Texas.

Latitude & Longitude (NAD 83): 29.851122, -97.354796

Project Description: The applicant proposes to place permanent fill material into 0.221 acre of wetlands and temporary impacts to an additional 0.009 acre of wetlands for the expansion of a parking lot at Indian Point Pier. The project would add an additional 25 parking spaces. The new parking area would be graded and cleared of vegetation for the placement of 1 foot of compacted subgrade, 6 inches of flexible base (limestone), 2 inches of base coarse, and 1 inch of asphalt overlay, for a total of approximately 650 cubic yards of fill. Construction of the expanded parking lot would occur from previously paved areas of the existing parking lot and road. The proposed expanded parking lot is part of additional parking lot improvements proposed for the entire Indian Point Park area, also referred to as the new Indian Point Pavilion. Additional improvements and parking lot enhancements would occur within the existing parking lot located outside Corps jurisdiction. As such, this permit application applies to only the parking lot expansion activities located within jurisdictional areas. Mitigation is proposed.

Type of Application: U.S. Army Corps of Engineers permit application # SWG-1997-01041. This application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Note: The consistency review for this project may be conducted by the Texas Commission on Environmental Quality as part of its certification under §401 of the Clean Water Act.

CMP Project No: 22-1015-F1

Applicant: Aransas County Navigation District

Location: The project site is located along existing breakwaters in Aransas Bay in Fulton, Aransas County, Texas.

Latitude & Longitude (NAD 83): 28.06036, -97.032276

Project Description: The applicant proposes to rehabilitate the existing Fulton Harbor concrete bulkhead by widening the breakwaters at the base to between approximately 20-feet and 27-feet during the installation of rock riprap along the Aransas Bay side. Prior to installing rock riprap, shoreline restoration fabric, or filter cloth, will be placed along the vertical face of the existing bulkhead and along the unvegetated bottom where rock riprap is proposed for installation. The average bay bottom elevation at the proposed rock riprap is approximately -4.5 feet NAVD 88. Rock riprap will be installed atop filter cloth to dissipate wind and wave energy and to hold the filter cloth in place. Rock riprap will be stacked vertically against the existing bulkhead with a typical top elevation of +3.4 feet NAVD 88, consistent with the top of current bulkhead. Rock riprap will include an approximately three-foot-wide crest and will extend out from the bulkhead and crest with an approximate 2.5:1 side slope resulting in a base width between approximately 20-feet and 27- feet. The bottom two feet of rock riprap material will consist of core stones. The installation of core stones will serve to establish the desired side slopes and to provide a stable base for the armor stones to sit. Large armor stones will then be installed atop the core stones to achieve final grades. Installation of the proposed rock riprap would result in the placement of approximately 7,454 cubic yards (CY) of clean fill. Of the 7,454 CY of material, approximately 7,267 CY would be placed below the high tide elevation of +2.65 feet NAVD 88. Prior to the initiation of construction activities, project materials and supplies will be staged in an upland area currently owned by the applicant near the proposed work area. Materials will then be loaded onto a shallow draft barge and transported to the work area via Aransas Bay. Rock riprap material will be installed mechanically starting at the northernmost portion of the existing bulkhead and

progressing towards the south and the access channel of Fulton Harbor. All construction activities will occur from a barge and no land access, or access from the Fulton Harbor side of the existing bulkhead. Ingress/egress to Fulton Harbor is not expected to be impacted by the proposed project. The original DA Permit 659 was issued 9 April 1948 and authorized a 570-foot bulkhead and to dredge up to -9 feet and the dredged materials used as fill material behind the bulkhead.

Type of Application: U.S. Army Corps of Engineers permit application # SWG-2021-00198. This application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Note: The consistency review for this project may be conducted by the Texas Commission on Environmental Quality as part of its certification under §401 of the Clean Water Act.

CMP Project No: 22-1016-F1

Further information on the applications listed above, including a copy of the consistency certifications or consistency determinations for inspection, may be obtained from the Texas General Land Office Public

Information Officer at 1700 N. Congress Avenue, Austin, Texas 78701, or via email at pialegal@glo.texas.gov. Comments should be sent to the Texas General Land Office Coastal Management Program Coordinator at the above address or via email at federal.consistency@glo.texas.gov.

TRD-202103849

Mark A. Havens

Chief Clerk

General Land Office

Filed: September 28, 2021

◆ ◆ ◆
Department of State Health Services

Order Placing Five Synthetic Cannabinoids, N-Ethylpentylone, and 4F-MDMB-BUTINACA into Schedule I, and Placing Lasmiditan in Schedule V

The Drug Enforcement Administration issued a final rule adopting an interim final rule placing lasmiditan (2,4,6-trifluoro-*N*-(6-(1-methylpiperidine-4-carbonyl)pyridine-2-yl)-benzamide), including its salts, in schedule V of the Controlled Substances Act without change. This final rule was published in the May 24, 2021 issue of the *Federal Register*, Volume 86, Number 98, pages 27803-27806 and was effective May 24, 2021.

The Drug Enforcement Administration issued a final rule permanently placing naphthalen-1-yl 1-(5-fluoropentyl)-1*H*-indole-3-carboxylate (Other names: NM2201 or CBL2201), *N*-(1-amino-3-methyl-1-oxobutan-2-yl)-1-(5-fluoropentyl)-1*H*-indazole-3-carboxamide (Other name: 5F-AB-PINACA), 1-(4-cyanobutyl)-*N*-(2-phenylpropan-2-yl)-1*H*-indazole-3-carboxamide (Other names: 4-CN-CUMYL-BUTINACA; 4-cyano-CUMYL-BUTINACA; 4-CN-CUMYL BINACA, CUMYL-4CN-BINACA, or SGT-78); methyl 2-(1-(cyclohexylmethyl)-1*H*-indole-3-carboxamido)-3-methylbutanoate (Other names: MMB-CHMICA or AMB-CHMICA); and, 1-(5-fluoropentyl)-*N*-(2-phenylpropan-2-yl)-1*H*-pyrrolo[2,3-*b*]pyridine-3-carboxamide (other name: 5F-CUMYL-P7AICA), including their salts, isomers, and salts of isomers whenever the existence of such salts, isomers, and salts of isomers is possible, into schedule I of the Controlled Substances Act. This final rule was published in the June 10, 2021 edition of the *Federal Register*, Volume 86, Number 110, pages 30775-30778 and was effective June 10, 2021. This action was based on the following:

(1) NM2201, 5F-AB-PINACA, 4-CN-CUMYL-BUTINACA, MMB-CHMICA, and 5F-CUMYL-P7AICA have a high potential for abuse that is comparable to other schedule I substances such as delta-9-tetrahydrocannabinol and JWH-018;

(2) NM2201, 5F-AB-PINACA, 4-CN-CUMYL-BUTINACA, MMB-CHMICA, and 5F-CUMYL-P7AICA currently have no accepted medical use in treatment in the United States; and,

(3) There is a lack of accepted safety for use of NM2201, 5F-AB-PINACA, 4-CN-CUMYL-BUTINACA, MMB-CHMICA, and 5F-CUMYL-P7AICA under medical supervision.

The Drug Enforcement Administration permanently placed 1-(1,3-benzodioxol-5-yl)-2-(ethylamino)pentan-1-one (Other names: *N*-ethylpentylone; ephylone) and its optical, positional, and geometric isomers, salts, and salts of isomers whenever the existence of such salts, isomers,

and salts of isomers is possible, in schedule I of the Controlled Substances Act. This final rule was published in the June 14, 2021 issue of the *Federal Register*, Volume 86, Number 112, pages 31427-31429 and was effective June 14, 2021. This action was based on the following:

1. *N*-Ethylpentylone has a high potential for abuse;
2. *N*-Ethylpentylone has no currently accepted medical use in treatment in the United States; and,
3. There is a lack of accepted safety for use of *N*-ethylpentylone under medical supervision.

The Drug Enforcement Administration issued a final rule creating a separate listing for 4F-MDMB-BINACA (Other names: 4F-MDMB-BUTINACA; methyl 2-(1-(4-fluorobutyl)-1*H*-indazole-3-carboxamido)-3,3-dimethylbutanoate) in schedule I of the Controlled Substances Act. This final rule was published in the June 22, 2021 edition of the *Federal Register*, Volume 86, Number 117, pages 32633-32635 and was effective June 22, 2021. This action was taken based on the following reasons:

1. 4F-MDMB-BINACA was added to Schedule II of the Convention on Psychotropic Substances of 1971 (1971 Convention); and
2. 4F-MDMB-BINACA is a positional isomer of 5F-AMB, an hallucinogenic substance in schedule I.

Pursuant to Section 481.034(g), as amended by the 75th legislature, of the Texas Controlled Substances Act, Health and Safety Code, Chapter 481, at least thirty-one days have expired since notice of the above referenced actions were published in the *Federal Register*. In the capacity as Commissioner of the Texas Department of State Health Services, John Hellerstedt, M.D., does hereby order the placement of the substances NM2201, 5F-AB-PINACA, 4-CN-CUMYL-BUTINACA, MMB-CHMICA, 5F-CUMYL-P7AICA, *N*-ethylpentylone, and 4F-MDMB-BUTINACA into schedule I, and maintenance of lasmiditan in schedule V.

-Schedule I hallucinogenic substances

Unless specifically excepted or unless listed in another schedule, a material, compound, mixture, or preparation that contains any quantity of the following hallucinogenic substances or that contains any of the substance's salts, isomers, and salts of isomers if the existence of the salts, isomers, and salts of isomers is possible within the specific chemical designation (for the purposes of this Schedule I hallucinogenic substances section only, the term "isomer" includes optical, position, and geometric isomers):

- (1) α -Ethyltryptamine (Other names: etryptamine; Monase; α -ethyl-1*H*-indole-3-ethanamine; 3-(2-aminobutyl) indole; α -ET; AET);
- (2) 4-Bromo-2,5-dimethoxyamphetamine (Other names: 4-bromo-2,5-dimethoxy- α -methylphenethylamine; 4-bromo-2,5-DMA);
- (3) 4-Bromo-2,5-dimethoxyphenethylamine (Other names: Nexus; 2C-B; 2-(4-bromo-2,5-dimethoxyphenyl)-1-aminoethane; α -desmethyl DOB);
- (4) 2,5-Dimethoxyamphetamine (Other names: 2,5-dimethoxy- α -methylphenethylamine; 2,5-DMA);
- (5) 2,5-Dimethoxy-4-ethylamphetamine (Other name: DOET);
- (6) 2,5-Dimethoxy-4-(*n*)-propylthiophenethylamine, its optical isomers, salts and salts of isomers (Other name: 2C-T-7);
- (7) 4-Methoxyamphetamine (Other names: 4-methoxy- α -methylphenethylamine; paramethoxyamphetamine; PMA);
- (8) 5-Methoxy-3,4-methylenedioxyamphetamine (Other name: MMDA);
- (9) 4-Methyl-2,5-dimethoxyamphetamine (Other names: 4-methyl-2,5-dimethoxy- α -methyl-phenethylamine; "DOM"; "STP");
- (10) 3,4-Methylenedioxyamphetamine (Other names: MDA; Love Drug);
- (11) 3,4-Methylenedioxymethamphetamine (Other names: MDMA; MDM; Ecstasy; XTC);
- (12) 3,4-Methylenedioxy-*N*-ethylamphetamine (Other names: *N*-ethyl- α -methyl-3,4(methylenedioxy)phenethylamine; *N*-ethyl MDA; MDE; MDEA);
- (13) *N*-Hydroxy-3,4-methylenedioxyamphetamine (Other name: *N*-hydroxy MDA);
- (14) 3,4,5-Trimethoxyamphetamine (Other name: TMA);
- (15) 5-Methoxy-*N,N*-dimethyltryptamine (Other names: 5-methoxy-3-[2-(dimethylamino)ethyl]indole, 5-MeO-DMT);
- (16) α -Methyltryptamine (Other name: AMT), its isomers, salts, and salts of isomers;
- (17) Bufotenine (Other names: 3- β -Dimethylaminoethyl)-5-hydroxyindole; 3-(2-dimethylaminoethyl)-5-indolol; *N,N*-dimethylserotonin; 5-hydroxy-*N,N*-dimethyltryptamine; mappine);
- (18) Diethyltryptamine (Other names: *N,N*-Diethyltryptamine; DET);
- (19) Dimethyltryptamine (Other name: DMT);
- (20) 5-Methoxy-*N,N*-diisopropyltryptamine, its isomers, salts, and salts of isomers (Other name: 5-MeO-DIPT);
- (21) Ibogaine (Other names: 7-Ethyl-6,6- β -7,8,9,10,12,13-octhydro-2-methoxy-6,9-methano-5*H*-pyrido[1',2':1,2] azepino [5,4-*b*] indole; Tabernanthe iboga);
- (22) Lysergic acid diethylamide;
- (23) Marijuana.

The term marihuana does not include hemp, as defined in Title 5, Agriculture Code, Chapter 121.

(24) Mescaline;

(25) Parahexyl (Other names: 3-Hexyl-1-hydroxy-7,8,9,10-tetrahydro-6,6,9-trimethyl-6*H*-dibenzo[b,d]pyran; Synhexyl);

(26) Peyote, unless unharvested and growing in its natural state, meaning all parts of the plant classified botanically as *Lophophora williamsii* *Lemaire*, whether growing or not, the seeds of the plant, an extract from a part of the plant, and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or extracts;

(27) *N*-ethyl-3-piperidyl benzilate;

(28) *N*-methyl-3-piperidyl benzilate;

(29) Psilocybin;

(30) Psilocyn;

(31) Tetrahydrocannabinols, meaning tetrahydrocannabinols naturally contained in a plant of the genus *Cannabis* (cannabis plant), except for up to 0.3 percent delta-9-tetrahydrocannabinols in hemp (as defined under Texas Agriculture Code 121), as well as synthetic equivalents of the substances contained in the cannabis plant, or in the resinous extractives of such plant, and/or synthetic substances, derivatives, and their isomers with similar chemical structure and pharmacological activity to those substances contained in the plant, such as the following:

1 cis or trans tetrahydrocannabinol, and their optical isomers;

6 cis or trans tetrahydrocannabinol, and their optical isomers;

3,4 cis or trans tetrahydrocannabinol, and its optical isomers;

(Since nomenclature of these substances is not internationally standardized, compounds of these structures, regardless of numerical designation of atomic positions covered.)

(32) Ethylamine analog of phencyclidine (Other names: *N*-ethyl-1-phenylcyclohexylamine; (1-phenylcyclohexyl)ethylamine; *N*-(1-phenylcyclohexyl)ethylamine; cyclohexamine; PCE);

(33) Pyrrolidine analog of phencyclidine (Other names: 1-(1 phenylcyclohexyl)-pyrrolidine; PCPy; PHP; rolicyclidine);

(34) Thiophene analog of phencyclidine (Other names: 1-[1-(2-thienyl)-cyclohexyl]-piperidine; 2-thienyl analog of phencyclidine; TPCP; TCP);

(35) 1-[1-(2-Thienyl)cyclohexyl]pyrrolidine (Other name: TCPy);

(36) 4-Methylmethcathinone (Other names: 4-methyl-*N*-methylcathinone; mephedrone);

(37) 3,4-Methylenedioxypropylvalerone (MDPV);

(38) 2-(2,5-Dimethoxy-4-ethylphenyl)ethanamine (Other name: 2C-E);

- (39) 2-(2,5-Dimethoxy-4-methylphenyl)ethanamine (Other name: 2C-D);
- (40) 2-(4-Chloro-2,5-dimethoxyphenyl)ethanamine (Other name: 2C-C);
- (41) 2-(4-Iodo-2,5-dimethoxyphenyl)ethanamine (Other name: 2C-I);
- (42) 2-[4-(Ethylthio)-2,5-dimethoxyphenyl]ethanamine (Other name: 2C-T-2);
- (43) 2-[4-(Isopropylthio)-2,5-dimethoxyphenyl]ethanamine (Other name: 2C-T-4);
- (44) 2-(2,5-Dimethoxyphenyl)ethanamine (Other name: 2C-H);
- (45) 2-(2,5-Dimethoxy-4-nitro-phenyl)ethanamine (Other name: 2C-N);
- (46) 2-(2,5-Dimethoxy-4-(n)-propylphenyl)ethanamine (Other name: 2C-P);
- (47) 3,4-Methylenedioxy-*N*-methylcathinone (Other name: Methylone);
- (48) (1-Pentyl-1*H*-indol-3-yl)(2,2,3,3-tetramethylcyclopropyl)methanone (Other names: UR-144; 1-pentyl-3-(2,2,3,3-tetramethylcyclopropoyl)indole);
- (49) [1-(5-Fluoro-pentyl)-1*H*-indol-3-yl](2,2,3,3-tetramethylcyclopropyl)methanone (Other names: 5-fluoro-UR-144, 5-F-UR-144, XLR11, (5-fluoro-pentyl)-3-(2,2,3,3-tetramethylcyclopropoyl)indole);
- (50) *N*-(1-Adamantyl)-1-pentyl-1*H*-indazole-3-carboxamide (Other names: APINACA, AKB48);
- (51) Quinolin-8-yl 1-pentyl-1*H*-indole-3-carboxylate, its optical, positional, and geometric isomers, salts and salts of isomers (Other names: PB-22; QUPIC);
- (52) Quinolin-8-yl 1-(5-fluoropentyl)-1*H*-indole-3-carboxylate, its optical, positional, and geometric isomers, salts and salts of isomers (Other names: 5-fluoro-PB-22; 5F-PB-22);
- (53) *N*-(1-Amino-3-methyl-1-oxobutan-2-yl)-1-(4-fluorobenzyl)-1*H*-indazole-3-carboxamide, its optical, positional, and geometric isomers, salts and salts of isomers (Other name: AB-FUBINACA);
- (54) *N*-(1-Amino-3,3-dimethyl-1-oxobutan-2-yl)-1-pentyl-1*H*-indazole-3-carboxamide (Other name: ADB-PINACA);
- (55) 2-(4-Iodo-2,5-dimethoxyphenyl)-*N*-(2-methoxybenzyl)ethanamine (Other names: 25I-NBOMe; 2CI-NBOMe; 25I; Cimbi-5);
- (56) 2-(4-Chloro-2,5-dimethoxyphenyl)-*N*-(2-methoxybenzyl)ethanamine (Other names: 25C-NBOMe; 2C-C-NBOMe; 25C; Cimbi-82);
- (57) 2-(4-Bromo-2,5-dimethoxyphenyl)-*N*-(2-methoxybenzyl)ethanamine (Other names: 25B-NBOMe; 2C-B-NBOMe; 25B; Cimbi-36);

(58) Marijuana extract, meaning an extract containing one or more cannabinoids that has been derived from any plant of the genus *Cannabis*, except for extracts derived from hemp (as defined under Texas Agriculture Code 121) containing up to 0.3% delta-9-tetrahydrocannabinol on a dry weight basis, other than separated resin (whether crude or purified) obtained from the plant;

(59) 4-Methyl-*N*-ethylcathinone (4-MEC);

(60) 4-Methyl- α -pyrrolidinopropiophenone (4-MePPP);

(61) α -Pyrrolidinopentiophenone ($[\alpha]$ -PVP);

(62) 1-(1,3-Benzodioxol-5-yl)-2-(methylamino)butan-1-one

(Other names: butylone; bk-MBDB);

(63) 2-(Methylamino)-1-phenylpentan-1-one (Other name: pentedrone);

(64) 1-(1,3-Benzodioxol-5-yl)-2-(methylamino)pentan-1-one

(Other names: pentylone; bk-MBDP);

(65) 4-Fluoro-*N*-methylcathinone (Other names: 4-FMC; flephedrone);

(66) 3-Fluoro-*N*-methylcathinone (Other name: 3-FMC);

(67) 1-(Naphthalen-2-yl)-2-(pyrrolidin-1-yl)pentan-1-one (Other name: naphyrone);

(68) α -Pyrrolidinobutiophenone (Other name: α -PBP);

(69) *N*-(1-Amino-3-methyl-1-oxobutan-2-yl)-1-(cyclohexylmethyl)-1*H*-indazole-3-carboxamide (Other name: AB-CHMINACA);

(70) *N*-(1-Amino-3-methyl-1-oxobutan-2-yl)-1-pentyl-1*H*-indazole-3-carboxamide (Other name: AB-PINACA);

(71) [1-(5-Fluoropentyl)-1*H*-indazol-3-yl](naphthalen-1-yl)methanone (Other name: THJ-2201);

(72) 1-Methyl-4-phenyl-1,2,5,6-tetrahydro-pyridine (Other name: MPTP);

(73) *N*-(1-Amino-3,3-dimethyl-1-oxobutan-2-yl)-1-(cyclohexylmethyl)-1*H*-indazole-3-carboxamide (Other names: MAB-CHMINACA; ABD-CHMINACA);

(74) Methyl 2-(1-(5-fluoropentyl)-1*H*-indazole-3-carboxamido)-3,3-dimethylbutanoate (Other names: 5F-ADB; 5F-MDMB-PINACA);

(75) Methyl 2-(1-(5-fluoropentyl)-1*H*-indazole-3-carboxamido)-3-methylbutanoate (Other name: 5F-AMB);

(76) *N*-(Adamantan-1-yl)-1-(5-fluoropentyl)-1*H*-indazole-3-carboxamide (Other names: 5F-APINACA; 5F-AKB48);

(77) *N*-(1-Amino-3,3-dimethyl-1-oxobutan-2-yl)-1-(4-fluorobenzyl)-1*H*-indazole-3-carboxamide (Other name: ADB-FUBINACA);

(78) Methyl 2-(1-(cyclohexylmethyl)-1*H*-indole-3-carboxamido)-3,3-dimethylbutanoate (Other names: MDMB-CHMICA; MMB-CHMINACA);

(79) Methyl 2-(1-(4-fluorobenzyl)-1*H*-indazole-3-carboxamido)-3,3-dimethylbutanoate (Other name: MDMB-FUBINACA);

(80) Methyl 2-(1-(4-fluorobenzyl)-1H-indazole-3-carboxamido)-3-methylbutanoate (Other names: FUB-AMB; MMB-FUBINACA; AMB-FUBINACA);

*(81) Naphthalen-1-yl 1-(5-fluoropentyl)-1H-indole-3-carboxylate (Other names: NM2201; CBL2201);

*(82) *N*-(1-Amino-3-methyl-1-oxobutan-2-yl)-1-(5-fluoropentyl)-1H-indazole-3-carboxamide (Other name: 5F-AB-PINACA);

*(83) 1-(4-Cyanobutyl)-*N*-(2-phenylpropan-2-yl)-1H-indazole-3-carboxamide (Other names: 4-CN-CUMYL-BUTINACA; 4-cyano-CUMYL-BUTINACA; 4-CN-CUMYL BINACA; CUMYL-4CN-BINACA; SGT-78);

*(84) Methyl 2-(1-(cyclohexylmethyl)-1H-indole-3-carboxamido)-3-methylbutanoate (Other names: MMB-CHMICA; AMB-CHMICA);

*(85) 1-(5-Fluoropentyl)-*N*-(2-phenylpropan-2-yl)-1H-pyrrolo[2,3-*b*]pyridine-3-carboxamide (Other name: 5F-CUMYL-P7AICA);

*(86) 1-(1,3-benzodioxol-5-yl)-2-(ethylamino)pentan-1-one (Other names: *N*-ethylpentylone, ephylone); and,

*(87) Methyl 2-(1-(4-fluorobutyl)-1H-indazole-3-carboxamido)-3,3-dimethylbutanoate (Other names: 4F-MDMB-BINACA; 4F-MDMB-BUTINACA).

-Schedule V depressants

Unless specifically exempted or excluded or unless listed in another schedule, any material, compound, mixture, or preparation, which contains any quantity of the following substances having a depressant effect on the central nervous system, including its salts:

(1) Brivaracetam ((2*S*)-2-[(4*R*)-2-oxo-4-propylpyrrolidin-1-yl]butanamide) (Other names; BRV; UCB-34714; Briviact);

(2) Cenobamate [(1*R*-1-(2-chlorophenyl)-2-(tetrazol-2-yl)ethyl] carbamate;

(3) Ezogabine including its salts, isomers and salts of isomers, whenever the existence of such salts, isomers and salts of isomers is possible;

(4) Lacosamide [(*R*)-2-acetoamido-*N*-benzyl-3-methoxy-propionamide];

*(5) Lasmiditan [2,4,6-trifluoro-*N*-(6-(1-methylpiperidine-4-carbonyl)pyridine-2-yl)-benzamide]; and,

(6) Pregabalin [(*S*)-3-(aminomethyl)-5-methylhexanoic acid].

Changes are marked by an asterisk(*)

Scott A. Merchant
Interim General Counsel
Department of State Health Services
Filed: September 23, 2021

◆ ◆ ◆
Texas Department of Insurance

Company Licensing

Application for Colonial Lloyds, a domestic Lloyds plan, to convert and change its name to Roadrunner Indemnity Company, a domestic fire and/or casualty company. The home office is in Waco, Texas.

Application for incorporation in the state of Texas for SCAN Health Plan Texas, Inc. (DBA SCAN Health Plan), a domestic Health Maintenance Organization (HMO). The home office is in Austin, Texas.

Any objections must be filed with the Texas Department of Insurance, within twenty (20) calendar days from the date of the *Texas Register* publication, addressed to the attention of Amy Garcia, 333 Guadalupe Street, MC 103-CL, Austin, Texas 78701.

TRD-202103853
James Person
General Counsel
Texas Department of Insurance
Filed: September 29, 2021

◆ ◆ ◆
Public Utility Commission of Texas

Notice of Application to Adjust High Cost Support Under 16 TAC §26.407(h)

Notice is given to the public of an application filed with the Public Utility Commission of Texas (commission) on September 24, 2021, to adjust the high-cost support it receives from the Small and Rural Incumbent Local Exchange Company Universal Service Plan without effect to its current rates.

Docket Title and Number: Application of Poka Lambro Telephone Cooperative, Inc. to Adjust High Cost Support under 16 Texas Administrative Code §26.407(h), Docket Number 52638.

Poka Lambro requests a high-cost support adjustment increase of \$373,491. The requested adjustment complies with the cap of 140% of the annualized support the provider received in the previous 12 months, as required by 16 Texas Administrative Code §26.407(g)(1).

Persons wishing to comment on the action sought should contact the Public Utility Commission of Texas by mail at P.O. Box 13326, Austin,

Texas 78711-3326, or by phone at (512) 936-7120 or toll free at (888) 782-8477 as a deadline to intervene may be imposed. Hearing and speech-impaired individuals with text telephone (TTY) may contact the commission through Relay Texas by dialing 7-1-1. All comments should reference Docket Number 52638.

TRD-202103854
Andrea Gonzalez
Rules Coordinator
Public Utility Commission of Texas
Filed: September 29, 2021

◆ ◆ ◆
Rio Grande Council of Governments

Request for Qualifications for Professional Engineering Services for Region E Water Planning Group

The Region E - FWTWPG, acting through the Rio Grande Council of Governments (RGCOG) invites all qualified parties to submit a Request for Qualifications for Engineering Services to prepare a regional water plan as prescribed by the TWDB. The qualified firm shall also assist the FWTWPG in preparing an appropriate scope of work that adequately addresses all tasks as described in *TWDB's Initial SOW for 2026*.

Proposals must be received no later than 2:00 p.m., Mountain Time, on Saturday, October 16, 2021, to Annette Gutierrez through electronic submission at annetteg@riocog.org.

RGCOG encourages participation by disadvantaged business enterprises and does not discriminate on the basis of age, race, color, religion, sex, national origin, or disability.

TRD-202103835
Annette Gutierrez
Executive Director
Rio Grande Council of Governments
Filed: September 27, 2021

◆ ◆ ◆
Supreme Court of Texas

Preliminary Approval of Amendments to Canon 6(B) of the Code of Judicial Conduct

Supreme Court of Texas

Misc. Docket No. 21-9120

Preliminary Approval of Amendments to Canon 6(B) of the Code of Judicial Conduct

ORDERED that:

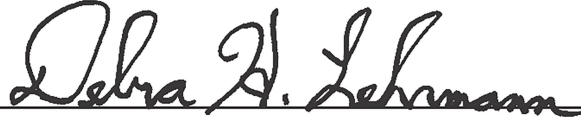
1. The Court preliminarily approves the amendments to Canon 6(B) of the Code of Judicial Conduct set out in this order.
2. The amendments authorize a constitutional County Judge who performs judicial functions to act as an arbitrator or mediator for compensation under the circumstances stated in Canon 6(B)(3). The Code has long authorized Justices of the Peace and Municipal Court Judges to engage in arbitration and mediation. The language added to Canon 6(B)(3) is imported directly from Canon 6(C)(1)(c), which applies to Justices of the Peace and Municipal Court Judges.
3. The Court will issue a final approval order at least 60 days after publication of the amendments in the November edition of the *Texas Bar Journal*. The amendments may change in response to public comments.
4. Comments should be sent to rulescomments@txcourts.gov. The Court requests that comments be sent by December 31, 2021.
5. The Clerk is directed to:
 - a. file a copy of this Order with the Secretary of State;
 - b. cause a copy of this Order to be mailed to each registered member of the State Bar of Texas by publication in the *Texas Bar Journal*;

- c. send a copy of this Order to each elected member of the Legislature; and
- d. submit a copy of the Order for publication in the *Texas Register*.

Dated: September 23, 2021



Nathan L. Hecht, Chief Justice



Debra H. Lehrmann, Justice



Jeffrey S. Boyd, Justice



John P. Devine, Justice




James D. Blacklock, Justice



J. Brett Busby, Justice



Jane N. Bland, Justice



Rebeca A. Huddle, Justice

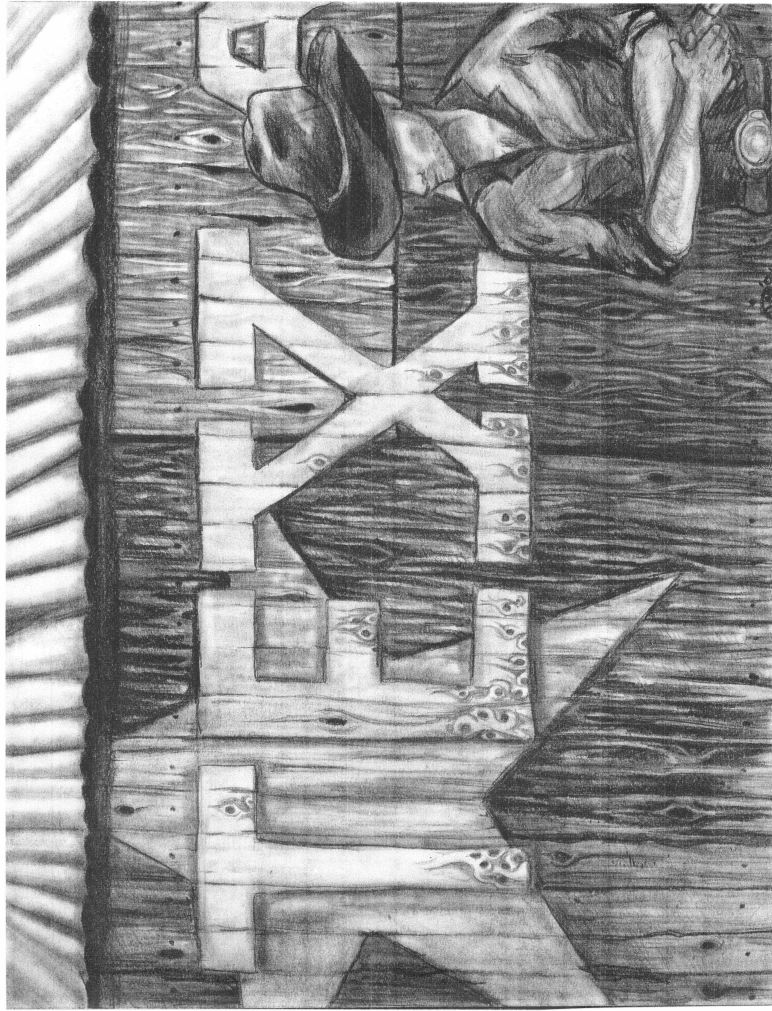
Canon 6: Compliance with the Code of Judicial Conduct

B. A County Judge who performs judicial functions shall comply with all provisions of this Code except the judge is not required to comply:

- (1) when engaged in duties which relate to the judge's role in the administration of the county;
- (2) with Canons 4D(2), 4D(3), or 4H;
- (3) with Canon 4F, unless the court on which the judge serves may have jurisdiction of the matter or parties involved in the arbitration or mediation;
- (~~3~~ 4) with Canon 4G, except practicing law in the court on which he or she serves or in any court subject to the appellate jurisdiction of the county court, or acting as a lawyer in a proceeding in which he or she has served as a judge or in any proceeding related thereto.
- (4 ~~5~~) with Canon 5(3).

TRD-202103749
Jaclyn Daumerie
Rules Attorney
Supreme Court of Texas
Filed: September 23, 2021

◆ ◆ ◆



How to Use the Texas Register

Information Available: The sections of the *Texas Register* represent various facets of state government. Documents contained within them include:

Governor - Appointments, executive orders, and proclamations.

Attorney General - summaries of requests for opinions, opinions, and open records decisions.

Texas Ethics Commission - summaries of requests for opinions and opinions.

Emergency Rules - sections adopted by state agencies on an emergency basis.

Proposed Rules - sections proposed for adoption.

Withdrawn Rules - sections withdrawn by state agencies from consideration for adoption, or automatically withdrawn by the Texas Register six months after the proposal publication date.

Adopted Rules - sections adopted following public comment period.

Texas Department of Insurance Exempt Filings - notices of actions taken by the Texas Department of Insurance pursuant to Chapter 5, Subchapter L of the Insurance Code.

Review of Agency Rules - notices of state agency rules review.

Tables and Graphics - graphic material from the proposed, emergency and adopted sections.

Transferred Rules - notice that the Legislature has transferred rules within the *Texas Administrative Code* from one state agency to another, or directed the Secretary of State to remove the rules of an abolished agency.

In Addition - miscellaneous information required to be published by statute or provided as a public service.

Specific explanation on the contents of each section can be found on the beginning page of the section. The division also publishes cumulative quarterly and annual indexes to aid in researching material published.

How to Cite: Material published in the *Texas Register* is referenced by citing the volume in which the document appears, the words “TexReg” and the beginning page number on which that document was published. For example, a document published on page 2402 of Volume 46 (2021) is cited as follows: 46 TexReg 2402.

In order that readers may cite material more easily, page numbers are now written as citations. Example: on page 2 in the lower-left hand corner of the page, would be written “46 TexReg 2 issue date,” while on the opposite page, page 3, in the lower right-hand corner, would be written “issue date 46 TexReg 3.”

How to Research: The public is invited to research rules and information of interest between 8 a.m. and 5 p.m. weekdays at the *Texas Register* office, James Earl Rudder Building, 1019 Brazos, Austin. Material can be found using *Texas Register* indexes, the *Texas Administrative Code* section numbers, or TRD number.

Both the *Texas Register* and the *Texas Administrative Code* are available online at: <http://www.sos.state.tx.us>. The *Texas Register* is available in an .html version as well as a .pdf version through the internet. For website information, call the Texas Register at (512) 463-5561.

Texas Administrative Code

The *Texas Administrative Code (TAC)* is the compilation of all final state agency rules published in the *Texas Register*. Following its effective date, a rule is entered into the *Texas Administrative Code*. Emergency rules, which may be adopted by an agency on an interim basis, are not codified within the *TAC*.

The *TAC* volumes are arranged into Titles and Parts (using Arabic numerals). The Titles are broad subject categories into which the agencies are grouped as a matter of convenience. Each Part represents an individual state agency.

The complete *TAC* is available through the Secretary of State’s website at <http://www.sos.state.tx.us/tac>.

The Titles of the *TAC*, and their respective Title numbers are:

1. Administration
4. Agriculture
7. Banking and Securities
10. Community Development
13. Cultural Resources
16. Economic Regulation
19. Education
22. Examining Boards
25. Health Services
26. Health and Human Services
28. Insurance
30. Environmental Quality
31. Natural Resources and Conservation
34. Public Finance
37. Public Safety and Corrections
40. Social Services and Assistance
43. Transportation

How to Cite: Under the *TAC* scheme, each section is designated by a *TAC* number. For example in the citation 1 TAC §27.15: 1 indicates the title under which the agency appears in the *Texas Administrative Code*; *TAC* stands for the *Texas Administrative Code*; §27.15 is the section number of the rule (27 indicates that the section is under Chapter 27 of Title 1; 15 represents the individual section within the chapter).

How to Update: To find out if a rule has changed since the publication of the current supplement to the *Texas Administrative Code*, please look at the *Index of Rules*.

The *Index of Rules* is published cumulatively in the blue-cover quarterly indexes to the *Texas Register*.

If a rule has changed during the time period covered by the table, the rule’s *TAC* number will be printed with the *Texas Register* page number and a notation indicating the type of filing (emergency, proposed, withdrawn, or adopted) as shown in the following example.

TITLE 1. ADMINISTRATION Part 4. Office of the Secretary of State Chapter 91. Texas Register

1 TAC §91.1.....950 (P)

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