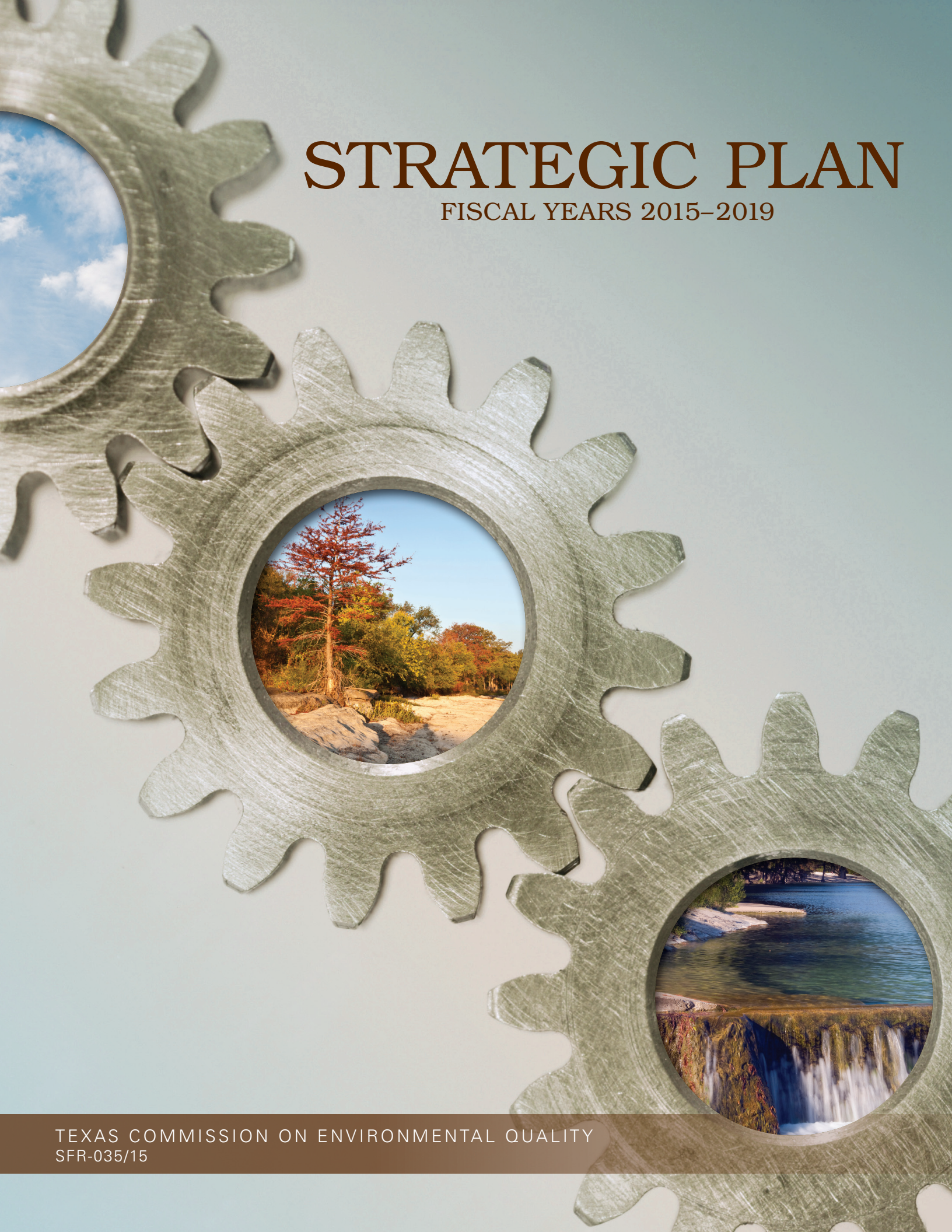


STRATEGIC PLAN

FISCAL YEARS 2015–2019





STRATEGIC PLAN

FISCAL YEARS 2015–2019

Submitted to the
Governor's Office of Budget, Planning and Policy
and the Legislative Budget Board

July 2014

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TCEQ STRATEGIC PLAN
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Part I

Vision, Mission, and Goals

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Statewide Vision and Mission

The governor’s philosophy of limited government and belief in fiscal discipline is reflected in the following critical priorities:

- Ensuring the economic competitiveness of our state by adhering to principles of fiscal discipline, setting clear budget priorities, living within our means, and limiting the growth of government.
- Investing in critical water, energy, and transportation infrastructure to meet the demands of our rapidly growing state.
- Ensuring excellence and accountability in public schools and institutions of higher education as we invest in the future of this state and ensure Texans are prepared to compete in the global marketplace.
- Defending Texans by safeguarding our neighborhoods and protecting our international border.
- Increasing transparency and efficiency at all levels of government to guard against waste, fraud, and abuse, ensuring that Texas taxpayers keep more of their hard-earned money to keep our economy and our families strong.

The Mission of Texas State Government

Texas state government must be limited, efficient, and completely accountable. It should foster opportunity and economic prosperity, focus on critical priorities, and support the creation of strong family environments for our children. The stewards of the public trust must be men and women who administer state government in a fair, just, and responsible manner. To honor the public trust, state officials must seek new and innovative ways to meet state government priorities in a fiscally responsible manner. Aim high . . . we are not here to achieve inconsequential things!

The Philosophy of Texas State Government

The task before all state public servants is to govern in a manner worthy of this great state. We are a great enterprise, and as an enterprise, we will promote the following core principles:

- First and foremost, Texas matters most. This is the overarching, guiding principle by which we will make decisions. Our state, and its future, is more important than party, politics, or individual recognition.
- Government should be limited in size and mission, but it must be highly effective in performing the tasks it undertakes.
- Decisions affecting individual Texans, in most instances, are best made by those individuals, their families, and the local government closest to their communities.
- Competition is the greatest incentive for achievement and excellence. It inspires ingenuity and requires individuals to set their sights high. Just as competition inspires excellence, a sense of personal responsibility drives individual citizens to do more for their future and the future of those they love.
- Public administration must be open and honest, pursuing the high road rather than the expedient course. We must be accountable to taxpayers for our actions.
- State government has a responsibility to safeguard taxpayer dollars by eliminating waste and abuse and providing efficient and honest government.

Finally, state government should be humble, recognizing that all its power and authority is granted to it by the people of Texas, and those who make decisions wielding the power of the state should exercise their authority cautiously and fairly.

Relevant Statewide Goals and Benchmarks

Natural Resources and Agriculture

The priority goal is to conserve and protect our state's natural resources (air, water, land, wildlife, and minerals) by:

- Providing leadership and policy guidance for state, federal, and local initiatives.
- Maintaining Texas' status as a leader in agriculture.
- Encouraging responsible, sustainable economic development.

Benchmarks

- Percentage of nitrogen oxide and criteria pollutants reduced in the air.
- Percentage of water conservation through decreased water usage, increased water reuse, and brush control.
- Percentage of Texas waters that meet or exceed safe water quality standards.
- Percentage of polluted-site cleanups to protect the environment and public health.
- Percentage of regulatory permits processed while ensuring appropriate public input.
- Percentage of environmental violations tracked and reported.
- Percentage of implemented new technologies that provide efficient, effective, and value-added solutions for a balanced Texas ecosystem.
- Average time taken to respond to natural disasters such as wildfires and hurricanes.

Agency Vision and Mission

The Mission of the TCEQ

The Texas Commission on Environmental Quality strives to protect our state's human and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

The Philosophy of the TCEQ

To accomplish our mission, we will:

- Base decisions on the law, common sense, sound science, and fiscal responsibility.
- Ensure that regulations are necessary, effective, and current.
- Apply regulations clearly and consistently.
- Ensure consistent, just, and timely enforcement when environmental laws are violated.
- Ensure meaningful public participation in the decision-making process.
- Promote and foster voluntary compliance with environmental laws and provide flexibility in achieving environmental goals.
- Hire, develop, and retain a high-quality, diverse workforce.

EEO Commitment

The TCEQ is an equal opportunity employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation, or veteran status.



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Historical and Organizational Overview

Overview of Agency Scope and Functions

In a state with diverse environmental challenges, the Texas Commission on Environmental Quality (TCEQ) implements a broad range of state and federal regulatory and cooperative activities.

Statutory Authority

Many of the TCEQ’s air, water, and waste regulatory and compliance activities are administered pursuant to state and federal law. The agency’s water-rights activities are established under state law. Table 1 lists the major citations for the agency’s authority under state law.

Table 1. Statutory Citations for TCEQ Authority

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Water Code, Chapter 5 Texas Commission on Environmental Quality	This chapter defines the organizational structure of the commission, its duties, responsibilities, authority, and functions. The chapter also establishes the office of the executive director to manage the administrative affairs of the commission and establishes environmental permitting procedures and fees, and standards for evaluating and using compliance history.
Texas Water Code, Chapter 7 Enforcement	This chapter sets forth the duties and obligations of the commission and the executive director to institute legal proceedings and to compel compliance with the relevant provisions of the Water Code and the Health and Safety Code, and rules, orders, permits, or other decisions of the commission. The chapter also authorizes the imposition of administrative, civil, and criminal penalties.
Texas Rev. Civ. Stat. Ann., art. 4447cc (Vernon’s) Environmental, Health, and Safety Audit Privilege Act	This article establishes audit privilege for regulated entities to encourage voluntary compliance with environmental and occupational health and safety laws.
Texas Water Code, Chapter 11 Water Rights	The State of Texas holds title to surface water in trust for the public. This chapter establishes a permitting system for the appropriation of surface water administered by the commission and provides for adjudication of claims by state district courts.
Texas Water Code, Chapter 12 Provisions Generally Applicable to Water Rights	This chapter addresses general powers and duties relating to water rights, federal projects and dam safety, oversight of districts, and disposition of fees.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Water Code, Chapter 13 Water Rates and Services	This chapter establishes a comprehensive system of regulating water and sewer utilities to ensure that rates, operations, and services are provided that are just and reasonable to consumers and utilities. On 9/1/14 much of the TCEQ's jurisdiction over water and sewer utilities under Chapter 13 is transferring to the Public Utility Commission. The TCEQ will retain jurisdiction to: enforce and collect the regulatory assessment fee pursuant to Texas Water Code, Section 13.041(g); regulate the issuance of water-loss reports pursuant to TWC 13.148; review and approve Emergency Preparedness Plans pursuant to TWC 13.1395; require a retail public utility to provide specific improvements in its service under TWC 13.253; request that the attorney general seek the appointment of a receiver under TWC 13.412; appoint a temporary manager pursuant to TWC 13.4132; and assess an administrative penalty under TWC 13.4151.
Texas Water Code, Section 16.236 Construction of Levees	This section requires the commission to review levee projects and adopt rules.
Texas Water Code, Chapter 26 Water Quality Control	This chapter requires the commission to ensure that the quality of water in the state is maintained consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, and the operation of existing industries, taking into consideration the economic development of the state, and to encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems. The chapter authorizes the commission to establish permitting, management, and monitoring programs to support such protection and addresses the regulation of underground and above-ground storage tanks.
Texas Water Code, Chapter 27 Injection Wells	This chapter establishes a policy of the state to maintain the quality of its fresh water and establishes a permitting system for injection-well activities not authorized by a rule of the commission or subject to the jurisdiction of the Railroad Commission.
Texas Water Code, Chapter 28 Drilled or Mined Shafts	This chapter establishes permitting requirements for drilled or mined shafts.
Texas Water Code, Chapter 30 Regional Waste Disposal	This chapter gives the commission authority to exercise continuing supervision over regional plans for water quality management control, and abatement of pollution under the chapter.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Water Code, Chapter 31 Subsurface Excavation	This chapter gives the commission authority to issue a permit to allow a person to drill, excavate, or otherwise construct a subsurface excavation.
Texas Water Code, Chapter 32 Subsurface Area Drip Dispersal Systems	This chapter establishes permitting requirements for subsurface area drip dispersal systems.
Texas Water Code, Chapter 35 Groundwater Studies	This chapter requires the commission to evaluate and designate priority groundwater management areas.
Texas Water Code, Chapter 36 Groundwater Conservation Districts	This chapter authorizes the creation of groundwater conservation districts to provide for the conservation, preservation, protection, recharging, and prevention of waste in groundwater; and to control subsidence, consistent with the objectives of Texas Constitution Article XVI, Section 59. The chapter recognizes groundwater conservation districts as the state’s preferred method of groundwater management.
Texas Water Code, Chapter 37 Occupational Licensing and Registration	This chapter requires the commission to adopt rules for licenses and registrations prescribed by Texas Water Code sections 26.0301, 26.364, 26.365, 26.366, 26.452, and 26.456; Texas Health and Safety Code sections 341.034, 361.027, and 366.071; and Texas Occupations Code sections 1903.251 and 1904.051.
Texas Water Code, chapters 41 through 44, and 46 River Compacts	These chapters provide a means for Texas and bordering states to enter into interstate agreements governing boundary and shared-use waters (Rio Grande, Pecos River, Red River, Canadian River, and Sabine River). Such agreements must be ratified by Congress.
Texas Water Code, Chapter 49 Provisions Applicable to All Districts	This chapter describes the rights, duties, and obligations of districts created by the authority of Texas Constitution Article III, Section 52, or Article XVI, Section 59 (unless exempted by other law). Generally, the provisions define the agency’s role in approving district bonds, appointing directors, approving certain fees, dissolving districts, and other district actions.
Texas Water Code, Chapter 51 Water Control and Improvement Districts	This chapter’s provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Water Code, Chapter 52 Underground Water Conservation Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 53 Fresh Water Supply Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 54 Municipal Utility Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 55 Water Improvement Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 56 Drainage Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 57 Levee Improvement Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 58 Irrigation Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 59 Regional Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 65 Special Utility Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.
Texas Water Code, Chapter 66 Stormwater Control Districts	This chapter's provisions govern the creation and regulation of this type of district and outline the role and authority of the TCEQ in regard to such districts.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 341, Subchapter C Sanitary Standards of Drinking Water; Protection of Public Water Supplies and Bodies of Water	The purpose of this subchapter is to preserve the public health, safety, and welfare by requiring the commission to ensure that systems that supply public drinking water do so in adequate quantities, and are financially stable and technically sound. The subchapter prescribes a review and approval process to be applied prior to the construction and operation of a new public water system and establishes administrative, civil, and criminal penalties for noncompliance.
Texas Health and Safety Code, Chapter 361 Solid Waste Disposal Act	The purpose of this chapter is to safeguard the health, welfare, and physical property of the people and to protect the environment by controlling the management of solid waste. The chapter authorizes the commission to control all aspects of the management of municipal and industrial solid waste and hazardous waste, and establishes fees and a permitting system for the administration of this responsibility. The chapter includes provisions authorizing the investigation and remediation of sites contaminated by hazardous substances, as well as other remediation and recycling programs.
Texas Health and Safety Code, Chapter 363 Municipal Solid Waste	This chapter establishes a cooperative framework among federal, state, and local governments and private enterprise for reductions in the generation of solid waste and its proper management, including disposal and processing to extract usable materials or energy. Subchapter C creates the Municipal Solid Waste Management and Resource Recovery Advisory Council.
Texas Health and Safety Code, Chapter 364 County Solid Waste	This chapter authorizes a cooperative effort by counties, public agencies, and other authorities and individuals for the safe and economical collection, transportation, and disposal of solid waste to control pollution in the state. Section 364.012(f) prohibits the commission from granting an application for a permit to process or dispose of municipal or industrial solid waste where prohibited by ordinance (with one exception).
Texas Health and Safety Code, Chapter 365 Litter	The purpose of this chapter is to safeguard the health, welfare, and physical property of the people and to protect the environment by controlling the management of litter and other solid waste. The chapter authorizes the commission to adopt rules and standards regarding the processing and treatment of litter and includes criminal penalties for violation of those rules, standards, or statutory provisions.
Texas Health and Safety Code, Chapter 366 On-Site Sewage Disposal Systems	This chapter requires that the commission regulate the construction, installation, alteration, repair, or extension of on-site sewage systems (OSSFs). The commission is authorized to enact fees, issue permits, and impose penalties in its efforts to eliminate and prevent health hazards in these systems. The commission is required to license or register persons who install and maintain OSSFs.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 367 On-Site Wastewater Treatment Research	This chapter establishes a funding mechanism for on-site wastewater treatment research. Section 367.010 directs the commission to collect a \$10 fee on all on-site wastewater treatment permit applications and enforce the collection of the fee by certain local governments. The fee is deposited to the credit of the water resources management account.
Texas Health and Safety Code, Chapter 369 Plastic Containers	This chapter requires that the appropriate symbol be placed on plastic containers to indicate the resin used to produce the container and provides for civil penalties. The commission is required to maintain a list of the appropriate symbols and may approve other symbols.
Texas Health and Safety Code, Chapter 370 Toxic Chemical Release Reporting	This chapter requires facilities that use toxic chemicals in excess of a threshold amount to submit a “toxic chemical release” form and accompanying fee to the agency. The purpose of the form is to inform the public and communities surrounding the facilities.
Texas Health and Safety Code, Chapter 371 Used Oil Collection, Management, and Recycling	This chapter authorizes the commission to adopt rules governing the registration and reporting requirements of used-oil handlers other than generators. The chapter also authorizes the commission to adopt rules and procedures necessary to implement the used-oil recycling program, and includes registration and reporting requirements for used-oil filter transportation, storage, and generation and requires the commission to adopt rules relating to financial responsibility.
Texas Health and Safety Code, Chapter 372 Plumbing Fixture Standards	This chapter requires the TCEQ to maintain a list of manufacturers for plumbing fixtures that meet the standards set out in the statute.
Texas Health and Safety Code, Chapter 374 Dry Cleaner Environmental Response	This chapter establishes an environmental regulation and remediation program for dry-cleaning facilities and dry-cleaning drop stations in Texas. Under the program, operating dry-cleaning facilities and drop stations pay registration and solvent fees into a fund that is then used by the commission to investigate and clean up eligible contaminated dry-cleaning sites.
Texas Health and Safety Code, Chapter 375 Removal of Convenience Switches	This chapter establishes a convenience-switch recovery program under which the commission provides regulatory incentives as well as collects and reports on data received regarding the recovery of convenience switches.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 382 Texas Clean Air Act	This chapter is established to safeguard the state’s air resources from pollution, consistent with the protection of public health, general welfare, and physical property, including the aesthetic enjoyment of air resources by the public and the maintenance of adequate visibility. The chapter establishes a comprehensive permitting system applicable to a variety of facilities that emit pollutants. The EPA has been the permitting authority under the federal Clean Air Act and a federal implementation plan for greenhouse gases. HB 788, 83rd Legislature, requires the TCEQ to promulgate rules for the TCEQ to be the permitting authority in Texas for GHGs and to have the FIP rescinded.
Texas Health and Safety Code, Chapter 384 Area Emission Reduction Credit Organizations (AERCO)	This chapter allows the establishment of organizations to promote the creation, trading, and tracking of emission-reduction credits in nonattainment areas. The commission has oversight authority to approve initial establishment, withdraw approval, dissolve or renew, and audit area emission-reduction credit organizations.
Texas Health and Safety Code, Chapter 386 Texas Emissions Reduction Plan (TERP)	This chapter establishes a number of program components aimed at reducing air emissions, including mobile-source incentives and energy efficiency requirements. The primary responsibility of the TCEQ is to implement the Emissions Reductions Incentive Program by awarding grants for the installation of emission-control equipment.
Texas Health and Safety Code, Chapter 387 Air Quality Research Support Program	This chapter establishes authority to contract with a nonprofit organization or institution of higher education to establish and administer a program to support research related to air quality.
Texas Health and Safety Code, Chapter 390 Clean School Bus Program	This chapter establishes a grant program, administered by the TCEQ, to reduce the exposure of schoolchildren to diesel exhaust in and around school buses through technology that reduces diesel emissions.
Texas Health and Safety Code, Chapter 391 New Technology Implementation for Facilities and Stationary Sources	This chapter establishes a grant program, administered by the TCEQ, to give incentives for the implementation of emissions-reduction technologies for facilities and stationary sources.
Texas Health and Safety Code, Chapter 392 Texas Clean Fleet Program	This chapter establishes a grant program, administered by the TCEQ, to give incentives for the replacement or repowering of diesel-powered fleet vehicles with alternative-fueled or hybrid vehicles.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 393 Alternative Fueling Facilities Program	This chapter establishes a grant program, administered by the TCEQ, to provide incentives for the establishment of fueling facilities in the air quality nonattainment areas for alternative fuels, including: biodiesel, natural gas, propane, hydrogen, electricity, and methanol (M85).
Texas Health and Safety Code, Chapter 394 Texas Natural Gas Vehicle Grant Program	This chapter establishes two new grant programs to be administered by the TCEQ: the Clean Transportation Triangle (CTT) Program and the Texas Natural Gas Vehicle Grant Program (TNGVGP). The CTT Program provides incentives for the establishment of natural-gas fueling facilities along the interstate highways connecting Houston, San Antonio, Fort Worth, and Dallas. The TNGVGP provides incentive funding for the replacement or repower of existing vehicles with natural-gas vehicles to be operated along the CTT highways and in the air quality nonattainment areas.
Texas Health and Safety Code, Chapter 401 Radioactive Materials and Other Sources of Radiation	This chapter authorizes a program that will ensure the effective regulation of sources of radiation for protection of the occupational and public health and safety and the environment, and will promote the orderly regulation (in the state, among states, and between the federal government and the state) of sources of radiation to minimize regulatory duplication. The chapter establishes a licensing and registration system applicable to persons who manufacture, produce, transport, own, process, or dispose of a source of radiation not exempted by law. The TCEQ has jurisdiction to regulate and license the recovery or processing of source material, the processing and disposal of by-product material, the commercial storage or processing of radioactive substances (except oil and gas NORM [naturally occurring radioactive material] waste), the disposal of radioactive substances (except oil and gas NORM waste), and low-level radioactive waste disposal sites.
Texas Health and Safety Code, Section 753.008 Flammable Liquids	This section of Chapter 753 gives the TCEQ concurrent jurisdiction with the Texas State Board of Insurance regarding the inspection of initial installation and other administrative supervision of above-ground storage tanks. The TCEQ has the primary authority for inspection of initial installation of the tanks and is required to report all violations of the chapter in regard to such tanks to the state fire marshal for enforcement proceedings.
Texas Government Code, Section 2155.145 Certain Purchases by Texas Natural Resource Conservation Commission	This section delegates purchasing functions relating to Texas Health and Safety Code 361, Subchapters F and I.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Government Code, Chapter 418	This chapter establishes the authority of the governor and the Texas Division of Emergency Management to prepare for and manage emergencies and disasters that affect the state, establishes state agencies as members of the State Emergency Management Council, and lays out responsibilities in emergencies.
Texas Government Code, Chapter 421	This chapter specifies TCEQ as a member of the Texas Homeland Security Council, and lays out responsibilities related to security and critical infrastructure protection.
Texas Local Government Code, Section 212.0101 Additional Requirements: Use of Groundwater	This subsection requires the TCEQ, by rule, to establish the appropriate form and content of a certification to be attached to a plat application under the section as well as requirements for certain plats to be transmitted to the Texas Water Development Board and any applicable groundwater conservation district.
Texas Local Government Code, Section 232.0032 Additional Requirements: Use of Groundwater	This subsection requires that the TCEQ, by rule, shall establish the appropriate form and content of a certification to be attached to a plat application under the section as well as requirements for certain plats to be transmitted to the Texas Water Development Board and any applicable groundwater conservation district.
Texas Local Government Code, Chapter 375 Municipal Management Districts in General	This chapter creates management districts to promote and benefit commercial development and commercial areas throughout the state and outlines the role and authority of the TCEQ in their creation.
Texas Natural Resources Code, Chapter 40 Oil Spill Prevention and Response Act of 1991	This chapter establishes the Texas General Land Office as the agency with primary response obligations for unauthorized oil spills, but includes provisions allowing other state agencies, such as the TCEQ, to carry out response and cleanup operations related to the unauthorized discharge of oil. Additionally, the TCEQ is a Natural Resource Trustee, and this chapter allows the Texas General Land Office, on behalf of the Natural Resource Trustees, to seek reimbursement from the federal oil-spill fund for damages to natural resources.
Texas Occupations Code, Chapter 1903 Irrigators	This chapter provides authority to license and regulate irrigators.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Occupations Code, Chapter 1904 Water Treatment Specialists	This chapter provides authority to license and regulate water-treatment specialists.
Texas Tax Code, Section 11.31 Tax Pollution Control Property	This section creates a tax exemption for pollution-control equipment. The TCEQ is required to determine the applicability of the exemption and to establish rules to make such determinations.
Texas Tax Code, Section 26.045 Rollback Relief for Pollution Control Requirements	This section creates tax-rollback rate adjustments for pollution-control equipment. The TCEQ is required to determine the applicability of the adjustment and is required to establish rules to make such determinations.

Historical Perspective

The history of natural-resource protection by the State of Texas is one of gradual evolution from protecting the right of access to natural resources (principally surface water) to a broader role in protecting public health and conserving natural resources for future generations of Texans.

Major Events in TCEQ History

Natural-resource programs were established in Texas at the turn of the 20th century, motivated initially by concerns over the management of water resources and water rights. In parallel with developments in the rest of the nation, and at the federal level, state natural-resource efforts broadened at mid-century to include the protection of air and water resources, and later to the regulation of generating hazardous and nonhazardous waste.

During the 1990s, the Texas Legislature moved to make natural-resource protection more efficient by consolidating programs. This trend culminated in the creation of the Texas Natural Resource Conservation Commission in the fall of 1993 as a comprehensive environmental-protection agency.

Sunset legislation passed by the Texas Legislature in 2001 continued the agency and changed its name to the Texas Commission on Environmental Quality. In 2011, sunset legislation continued the TCEQ through 2023.

The major events in the history of the TCEQ are outlined below. **Federal items of importance are in bold.**

- 1905 ■ The Legislature authorizes the creation of the first drainage districts.
- 1913 ■ The Irrigation Act creates the Texas Board of Water Engineers to establish procedures for determining surface water rights.
- 1914 ■ The Texas Board of Water Engineers publishes its first rules and regulations.
- 1917 ■ A constitutional amendment authorizes the creation of conservation and reclamation districts as needed.
- 1919 ■ The Legislature creates freshwater supply districts.
- 1925 ■ The Legislature organizes water control and improvement districts.
- 1929 ■ The Legislature creates the first river authority (the Brazos River Authority).

- 1945 ■ Legislation authorizes the Texas Department of Health to enforce drinking-water standards for public water-supply systems.
- 1949 ■ Legislation declares that groundwater is private property.
- The Legislature creates underground water-conservation districts.
- 1952 ■ The Texas Department of Health conducts the first air study in Texas.
- 1953 ■ The Legislature creates the Texas Water Pollution Control Advisory Council in the Department of Health as the first state body charged with dealing with pollution-related issues.
- 1956 ■ **The U.S. Congress passes the Water Pollution Control Act.**
- Texas' first air-quality initiative is established when the state Department of Health begins air sampling.
- 1957 ■ The Legislature creates the Texas Water Development Board to forecast water-supply needs and fund water-supply and -conservation projects.
- 1959 ■ **Congress passes the Atomic Energy Act.**
- 1961 ■ The Texas Pollution Control Act establishes the Texas Water Pollution Board, and eliminates the Water Pollution Advisory Council, creating the state's first true pollution-control agency.
- A water-well drillers' advisory group is established.
 - The Injection Well Act is passed, authorizing the Texas Board of Water Engineers to regulate waste disposal (other than that from the oil and gas industry) into the subsurface through injection wells.
- 1962 ■ The Texas Board of Water Engineers becomes the Texas Water Commission, with additional responsibilities for water conservation and pollution control.
- The Texas Water Pollution Board adopts its first rules and regulations.
- 1963 ■ **Congress enacts the Clean Air Act.**
- 1965 ■ **Congress passes the Water Resources Planning Act.**
- The Texas Clean Air Act establishes the Texas Air Control Board in the Department of Health to monitor and regulate air pollution in the state.
 - The Texas Water Commission becomes the Texas Water Rights Commission and functions not related to water rights are transferred to the Texas Water Development Board.
 - The Water Well Drillers Act establishes the Water Well Drillers Board.
- 1966 ■ The first Texas Air Control Board members are appointed.
- 1967 ■ The Texas Water Quality Act establishes the Texas Water Quality Board, assuming all functions of the Water Pollution Control Board. The TWQB adopts its first rules.
- The Texas Air Control Board adopts its first air-quality regulations.
- 1969 ■ Texas takes over most federal air-monitoring responsibilities.
- The Texas Solid Waste Disposal Act authorizes the Texas Water Quality Board to regulate industrial solid waste, and the Texas Department of Health to regulate municipal solid waste.
 - **A presidential order creates the U.S. Environmental Protection Agency (EPA).**
- 1970 ■ **The federal Clean Air Act is amended, requiring states to develop state implementation plans.**
- 1971 ■ **The EPA adopts National Ambient Air Quality Standards (NAAQS).**
- The Legislature first authorizes municipal utility districts.
 - The Texas Air Control Board establishes an air permits program.
- 1972 ■ **Congress passes the Clean Water Act.**
- The Texas Air Control Board submits its first State Implementation Plan to the EPA. It also deploys the first continuous air-monitoring station.

- 1973 ■ The Legislature removes the Texas Air Control Board from the Department of Health, making it an independent state agency.
- 1974 ■ *Texas et al. v. the U.S. Environmental Protection Agency* challenges the EPA's plan for controlling ozone in Texas.
- The Texas Air Control Board completes deployment of the first continuous-monitoring network.
 - **Congress passes the Safe Drinking Water Act.**
- 1975 ■ The Texas Air Control Board proposes Texas' Five-Point Plan as an amendment to the federal Clean Air Act.
- 1976 ■ **Congress passes the Resource Conservation and Recovery Act to govern the disposal of all types of solid and hazardous wastes.**
- 1977 ■ **The federal Clean Air Act and Clean Water Act are amended.**
- The Legislature creates the Texas Department of Water Resources by combining the three existing water agencies. A six-member board is set up as a policy-making body for the new agency. The Texas Water Development Board is retained as the legislative and policy-making body. The Water Rights Commission is renamed the Texas Water Commission and sits as a quasi-judicial body that rules on permits. The Water Quality Board is abolished.
- 1978 ■ **The EPA establishes National Ambient Air Quality Standards for lead.**
- 1979 ■ **The EPA revises the 1971 one-hour ozone air-quality standard from 0.08 parts per million to 0.12 ppm.**
- The Texas Air Control Board submits revisions of the State Implementation Plan to the EPA.
- 1980 ■ **Congress passes the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), better known as the Superfund bill, to pay for the cleanup of contaminated sites.**
- **Congress passes the Low-Level Radioactive Waste Act.**
 - The Texas Air Control Board submits a plan for addressing lead pollution to the EPA.
- 1981 ■ The Legislature creates the Texas Low-Level Radioactive Waste Disposal Authority, with responsibility for siting, operating, and decommissioning a disposal facility for commercial low-level radioactive waste.
- 1982 ■ The Texas Air Control Board submits a Harris County ozone plan to the EPA. It also reorganizes its monitoring network and relocates continuous air-monitoring stations.
- **Texas receives primary authorization from the EPA for the registration and permitting of underground injection control.**
- 1984 ■ **Congress passes the Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act.**
- **Texas receives final RCRA authorization from the EPA.**
- 1985 ■ **Congress passes amendments to the 1980 Low-Level Radioactive Waste Act.**
- The Legislature dissolves the Department of Water Resources and transfers regulatory enforcement to the recreated Texas Water Commission, and planning and financing responsibilities to the recreated Water Development Board.
 - The Legislature moves the Water Rates and Utilities Services Program from the Public Utility Commission of Texas to the newly created Texas Water Commission.
 - The Texas Air Control Board mobile sampling laboratory is first deployed.
- 1986 ■ **Congress passes the Superfund Amendments and Reauthorization Act, reauthorizes CERCLA, and creates the Toxic Release Inventory.**
- **Congress amends the Safe Drinking Water Act.**
- 1987 ■ **Congress passes the Water Quality Act.**

- Texas establishes an EPA-approved state wellhead-protection program.
- 1989 ■ The Legislature expands and funds the Petroleum Storage Tank Program.
 - The Texas Radiation Control Act authorizes the Texas Department of Health to license the disposal of radioactive waste.
- 1990 ■ **Congress adopts the Clean Air Act Amendments of 1990.**
 - **Congress passes the Oil Pollution Act.**
 - **The Texas Water Commission receives initial authority for the federal HSWA.**
- 1991 ■ The Texas Air Control Board is expanded to implement the 1990 Amendments to the federal Clean Air Act.
 - The Legislature, in special session, creates the Texas Natural Resource Conservation Commission, to be effective Sept. 1, 1993. Preparation begins for the consolidation of the Texas Water Commission and the Texas Air Control Board into the TNRCC.
- 1992 ■ The Texas Water Commission acquires responsibility for drinking water, municipal solid waste, and the licensing of radioactive substances from the Texas Department of Health.
 - The Water Well Drillers Board and the Board of Irrigators are merged into the Texas Water Commission.
- 1993 ■ The Texas Natural Resource Conservation Commission begins operation, bringing together for the first time regulatory programs for air, water, and waste.
 - The Legislature adopts House Bill (HB) 1920, which establishes the Tax Relief for Pollution-Control Equipment Program, to be administered by the TNRCC.
- 1995 ■ **The EPA establishes the Environmental Performance Partnership Grant (PPG) program**, funding states to administer environmental programs such as air-pollution control (Section 105 of the Clean Air Act), water-pollution control (Section 106 of the Clean Water Act), and nonpoint source management (Sections 205(j)(5) and 319(h) of the Clean Water Act).
- 1996 ■ **Congress reauthorizes the Safe Drinking Water Act.**
- 1997 ■ **The EPA replaces the 1979 ozone air-quality standard with an eight-hour standard set at 0.08 parts per million.**
 - The Legislature transfers regulation of water-well drillers from the TNRCC to the Texas Department of Licensing and Regulation.
 - The Legislature returns oversight of uranium mining, processing, and by-product disposal to the Texas Department of Health.
 - The TNRCC concludes a Performance Partnership Agreement with the EPA, allowing limited flexibility in federally funded program organization and funding. The aim of the agreement is to allocate resources most appropriately throughout Texas on a regional basis.
 - The Legislature adopts Senate Bill (SB) 1, mandating water-conservation planning for large water users and requiring the development of drought contingency plans by public water suppliers.
- 1998 ■ **The EPA delegates to Texas the National Pollutant Discharge Elimination System program, becoming the Texas Pollutant Discharge Elimination System, administered by the TNRCC.**
- 1999 ■ The Legislature transfers the functions of the Texas Low-Level Radioactive Waste Disposal Authority to the TNRCC.
 - The Legislature adopts HB 801, which modifies the permitting process for permits administered by the agency for which public notice and opportunity for a hearing are required. The legislation requires early public notice, encourages early public involvement, and requires substantive public comment and agency response. This legislation establishes criteria that would limit the scope of hearings by requiring referral of discrete issues that are in dispute and material to the decision of the

- commission. This process applies to permits issued by the agency under chapters 26 and 27 of the Texas Water Code and chapters 361 and 382 of the Health and Safety Code.
- 2001 ■ The agency is continued for 12 years under HB 2912, which changes the TNRCC's name to the Texas Commission on Environmental Quality by Jan. 1, 2004.
- The Legislature transfers responsibility for accreditation of environmental laboratories and certification of residential-water-treatment specialists from the Texas Department of Health to the TNRCC.
 - The Texas Environmental Health Institute is created by joint agreement between the TNRCC and the Texas Department of Health to identify health conditions related to living near a federal or state Superfund site.
 - The Texas Emissions Reduction Plan (TERP) is established by the Legislature, to be administered by the TNRCC, the comptroller, the Public Utility Commission of Texas, and the Texas Council on Environmental Technology.
- 2002 ■ On Sept. 1, the Texas Natural Resource Conservation Commission formally changes its name and begins doing business as the Texas Commission on Environmental Quality.
- 2003 ■ Under HB 1365, the Legislature provides a stable funding source for TERP program activities under the TCEQ and ends funding for TERP-related programs under the comptroller and the Public Utility Commission of Texas.
- The Legislature establishes a program for dry-cleaning regulation and remediation at the TCEQ with the passage of HB 1366.
 - Through HB 1567, the Legislature provides for the licensing of a facility for disposing of low-level radioactive waste and establishes procedures for the TCEQ to accept and assess license applications from businesses to dispose of such waste.
 - In the third called session, the Legislature transfers the technology research and development program within the TERP from the Texas Council on Environmental Technology to the TCEQ.
- The TCEQ implements the Permit Time-Frame Reduction Project, designed to shorten the time it takes to review major uncontested permits.
- 2004 ■ The TCEQ initiates the Environmental Monitoring and Response System, designed to improve the agency's ability to measure environmental conditions in real time, notify the public of potential threats, and respond quickly and proactively.
- 2005 ■ The TCEQ undertakes comprehensive review and overhaul of the state's regulations on municipal solid waste.
- The commissioners direct TCEQ personnel to begin a comprehensive review, including extensive public involvement, of the agency's enforcement process.
 - The Legislature authorizes the Clean School Bus Program with passage of HB 3469.
- 2006 ■ The TCEQ reviews the extensive public comments on the agency's enforcement process. The commissioners adopt a number of significant revisions to the process, including a pilot field-citation program, which begins on March 13.
- On March 1, the TCEQ adopts major revision, streamlining, and improvement of state regulations on municipal solid waste.
- 2007 ■ The Legislature passes SB 1604, which transfers regulatory authority from the Department of State Health Services (formerly the Texas Department of Health) to the TCEQ for commercial radioactive-waste processing, uranium mining, and by-product disposal.
- SB 1604 also addresses the process for TCEQ review of a pending application submitted to the DSHS for a by-product-disposal facility proposed for Andrews County.
 - In addition, SB 1604 addresses the TCEQ's underground injection-control program for

- the regulation of in situ uranium mining and requires the TCEQ to administer a new state fee for the disposal of radioactive wastes other than low-level radioactive waste.
- SB 1436 transfers the responsibility for the National Floodplain Insurance Program from the TCEQ to the Texas Water Development Board.
 - Passage of SB 12 extends the Texas Emissions Reduction Plan through August 2013. It also expands the uses of TERP funds, including use by the Clean School Bus Program.
 - SB 12 also amends the Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program to enhance its availability and increase grant amounts for the purchase of new vehicles.
 - The Legislature extends the reimbursement program for leaking underground storage tanks from 2008 to 2012 and requires insurance companies to notify the TCEQ if the owner of a petroleum storage tank has cancelled or failed to renew insurance coverage.
 - The Legislature passes HB 2714, which requires computer manufacturers to establish recycling programs for computers of their own brand.
 - The Legislature passes SB 3, HB 3, and HB 4, which amend various sections of the Texas Water Code and set out a new regulatory approach for ensuring surface water to meet the environmental flow needs of river, bay, and estuary systems.
 - The Legislature grants property owners the right to register and participate in the Dry Cleaner Remediation Fund and imposes additional fees and restrictions on the use of perchloroethylene.
 - HB 3732 establishes incentives such as property-tax exemptions and expedited permit processing for the use of clean coal, biomass, petroleum coke, solid waste, or new liquid-fuel technology in generating electricity.
 - The TCEQ adopts the Texas BART (Best Available Retrofit Technology) rule, requiring emission controls for certain industrial facilities emitting air pollutants that contribute to regional haze.
 - The Rio Grande watermaster announces the receipt of more than 224,000 acre-feet of water from Mexico at the Amistad Reservoir near Del Rio, effectively eliminating Mexico's water debt to the United States.
 - On Dec. 18, the governor submits to the EPA his recommendation that all areas of Texas meet the revised the 24-hour standard for fine particulate matter (PM_{2.5}) under the National Ambient Air Quality Standards.
- 2008
- In early 2008, the TCEQ upgrades its electronic permitting system (ePermits) for submissions of applications for the stormwater general permit. After the program upgrade, usage rose from 22 percent to 53 percent.
 - The TCEQ responds to the aftermath of Hurricane Ike, participating in a massive recovery effort.
 - **On March 12, the EPA lowers the 1997 eight-hour ozone NAAQ (National Ambient Air Quality) standard of 0.08 parts per million to 0.075 ppm.**
 - **On May 20, the EPA proposes to lower the NAAQ standard for lead from the current 1.5 micrograms of lead per cubic meter of ambient air.**
 - As required by the federal Clean Air Act for all the states, the governor must submit to the EPA the list of areas that the state believes are not meeting the federal ozone standard. To assist the governor in providing that list, the commission makes recommendations in December on what areas in Texas did not meet the revised ozone standard.
- 2009
- In March, the governor submits to the EPA the list of areas in Texas that do not meet the 0.075 ppm eight-hour ozone standard.

- The 81st Legislature passes HB 1796, which extends TERP through 2019 and establishes the New Technology Implementation Grants Program within TERP.
 - SB 1759 establishes the Texas Clean Fleet Program.
 - SB 361 requires water and sewer service providers to submit emergency-preparedness plans to demonstrate their ability to conduct emergency operations.
 - HB 3547 gives additional enforcement authority to the TCEQ if an owner or operator of a dry-cleaning facility or drop station does not properly register as required under Texas statutes.
 - During the special session, the Legislature adopts legislation amending the agency's sunset date from 2013 to 2011.
- 2010
- The TCEQ responds to record flooding in the Rio Grande area, performing essential duties to help control flooding and minimize damage to the communities along the border.
 - The agency enacts new performance standards for plumbing fixtures sold in Texas as mandated by HB 2667. The standards will help the state save water by 20 percent or more for each plumbing fixture that is installed.
 - The TCEQ makes revisions to the State Implementation Plan for the Houston-Galveston-Brazoria metropolitan area that would reduce the cap on highly reactive volatile organic compounds by 25 percent and bring the area into attainment with the 1997 eight-hour ozone standard.
 - The agency implements rules to regulate volatile organic compound emissions created from offset lithographic printing and letterpress printing.
 - The TCEQ adopts EPA amendments to the Clean Air Interstate Rule that modify control periods and heat inputs used to measure nitrogen oxides under this program.
- **The EPA enacts a number of final rules relating to greenhouse-gas (GHG) emissions:**
 - GHG emission standards for light-duty vehicles
 - Mandatory reporting of greenhouse gases from large sources and suppliers of GHG
 - Regulation of GHG emissions for power plants, refineries, and large industrial plants under the Clean Air Act
 - **The EPA adopts new one-hour standards for nitrogen dioxide at 100 parts per billion and sulfur dioxide at 75 parts per billion.**
- 2011
- The TCEQ responds to and manages the worst one-year drought that has occurred in Texas since records have been kept.
 - The TCEQ Internet domain name changes from <www.tceq.state.tx.us> to <www.tceq.texas.gov>.
 - The Legislature continues the TCEQ for 12 years, until 2023, under HB 2694. The legislation also makes changes to several program areas, such as focusing the Dam Safety Program on the most hazardous dams in the state, transferring the authority for making groundwater protection recommendations regarding oil and gas activities to the Railroad Commission, and increasing the maximum to \$25,000 for almost all penalties and \$5,000 for others, such as water-rate penalties.
 - HB 451 requires the TCEQ to establish a “Don’t Mess With Texas Water” program to prevent illegal dumping that affects the state’s surface waters.
 - HB 1981 modifies the TCEQ’s current Air Pollutant Watch List process, including changes to the requirements for publishing notices and allowing public comment. In addition, the bill requires a publicly available online database for emission events and legislative notification of releases that substantially endanger human health or the environment.

- SB 20 and SB 385 establish three new grant programs under TERP: the Texas Natural Gas Vehicle Grant Program, a program to fund natural gas fueling stations, and an alternative fueling facilities program.
 - SB 329 creates a program to recycle television equipment. It includes shared responsibility among consumers, retailers, manufacturers, and the state government.
 - SB 1134 prohibits the TCEQ from promulgating new or amending existing authorizations (permits by rule [PBRs] or standard permits) for the oil and gas industry without performing a regulatory-impact analysis and extensive monitoring, and considering geographical limitations.
 - SB 1258 allows the TCEQ to issue a PBR to enable counties or municipalities with a population of 10,000 or less to dispose of demolition waste from buildings that are abandoned or found to be a nuisance. Disposal can only occur on land that is owned by the county and would qualify for an arid exemption.
- 2012
- In preparation for the 2012 hurricane season, the TCEQ assigns emergency-response functions to all 16 of its regional offices, allowing the agency to respond to multiple concurrent emergencies within the state.
 - The agency hosts its 20th annual Environmental Trade Fair and Conference. Over 3,000 attend the event, plus 1,100 exhibitors.
 - The TCEQ enacts eligibility and requirement rules for the Texas Natural Gas Vehicle Grant Program and the Alternative Fueling Facilities Program, and announces \$2.3 million in grants to create facilities for alternative fuel in the nonattainment areas of Texas.
 - The agency conducts eight drought emergency-planning workshops across the state for local government officials, board members, and water-system operators.
 - The TCEQ takes over research responsibilities for the Texas On-Site Wastewater Treatment Research Council and adopts rules requiring risers and covers for on-site sewage facilities.
- The agency updates the PBR for oil and gas sites in urban locations and close proximity to the public in the Barnett Shale region, and increases the number of local investigators and gas monitors in the area.
 - The TCEQ adopts rules for implementation of the “Don’t Mess with Texas Water” program.
- 2013
- The Legislature passes SB 567 and HB 1600, which transfer the majority of water and wastewater utility regulation from the TCEQ to the Texas Public Utility Commission.
 - HB 252 requires retail public utilities to report to the TCEQ when their available water supply is less than 180 days.
 - HB 2615 increases penalty fees for water-rights holders who fail to submit an annual water-usage report to the TCEQ.
 - HB 788 directs the agency to promulgate rules that allow it to issue greenhouse-gas air permits.
 - SB 1727 moves several existing programs (the Texas Clean Fleet Program, Alternative Fueling Facilities Program, and Natural Gas Vehicle Grant Program) into the TERP program.
 - SB 1532 grants the TCEQ authority to allow small-scale injection wells within certain portions of the Barton Springs–Edwards Aquifer Conservation District to facilitate research projects in desalination and aquifer storage and recovery.
 - Country-music star Kevin Fowler donates his talents for radio and TV spots that were produced by the TCEQ together with the Texas Parks and Wildlife Department, and aired on Texas radio and TV stations throughout the summer. Fowler’s contributions included writing and performing the “Take Care of Texas” campaign’s jingle.
 - **The EPA issues a final rule that creates exemptions, for wells that capture and sequester carbon, from its hazardous-waste regulations.**

Key Functions

The Texas Legislature created the agency Sept. 1, 1993, by consolidating the Texas Water Commission, the Texas Air Control Board, and environmental programs from the Texas Department of Health. The TCEQ is a complex institution, continually performing many diverse functions to meet its commitments and responsibilities under state and federal law. The agency's major responsibilities fall into the following categories:

Operations

- *Permitting and Licensing Management.* Issuing, administering, renewing, and modifying permits, water rights, licenses, or certifications for organizations and individuals whose activities have some potential or actual environmental impact that must be formally authorized by the agency.
- *Public Assistance Management.* Responding to requests for information by external parties and conducting outreach with regard to agency obligations. Responding to complaints lodged by affected or interested parties, including addressing the cause of complaints and notifying the complainant of action taken.
- *Evaluation of Public Health Effects.* Assessing the impact on public health of toxic substance releases, transfers, and disposal.
- *Ambient Monitoring and Sampling, Laboratory Analysis.* Monitoring the current condition of a geographic area or natural resource often through sampling or surveys.
- *Technical Data Gathering, Management, and Analysis.* Providing scientific support for the design and implementation of specific strategies to address environmental improvements.
- *Compliance Inspections and Monitoring.* Monitoring the compliance of regulated entities through such activities as reviewing submitted reports and conducting site visits and inspections.
- *Release Identification and Reporting.* Identifying and reporting on activities, processes, emissions,

and environmental impacts associated with the regulated community.

- *Violation and Enforcement Management.* Identifying, verifying, and tracking violations of regulations and initiating enforcement actions in response to violations.
- *Remediation Oversight.* Overseeing cleanups made by responsible parties, local authorities, and contractors, and ensuring that grants and funds authorized for cleanup reimbursements are disbursed appropriately.
- *Emergency Response.* Responding to environmental emergencies to coordinate evacuation, public-health protection, and spill cleanup.
- *Homeland Security.* Assisting in the planning, development, coordination, and implementation of initiatives to promote the governor's homeland security strategy, and to detect, deter, respond to and assist with recovery from disasters, both natural and human-caused.
- *Technical Assistance and Pollution Prevention.* Overseeing agency activities focused on helping a regulated facility achieve compliance, promote conservation, and reduce pollution voluntarily.
- *Air-Emissions Trading.* Tracking and verifying the trading of air-emissions credits to ensure that trading is done in compliance with the program charter.

Administration

- *Development of Regulations, Policies, and Procedures.* Creating rules and policies to guide agency activities.
- *Program Management.* Planning, reporting, and tracking of program activities.
- *Budget Development.* Preparing, modifying, and reporting the agency budget. Developing agency goals and objectives and planning the allocation of personnel and financial resources.
- *Grant and Contract Administration.* Administering grants and contracts awarded to or by the agency.

- *Legal Support.* Analyzing and interpreting statutes and regulations, and representing the TCEQ in formal and informal settings.
- *Bankruptcy Administration.* Pursuing debtors who have filed for bankruptcy protection in federal courts to recover claims owed to the TCEQ.
- *Fund Administration, Accounting, Disbursements, and Payroll.* Managing funds limited to specific uses and processing payroll.
- *Revenue Estimation.* Forecasting and monitoring agency revenues and funding.
- *Purchasing and Asset Management.* Administering the purchase, location, use, and status of all agency assets.
- *Personnel Management, Recruitment, and Training.* Providing and supporting a skilled workforce for the agency.
- *Information-Resource Management.* Defining, designing, and maintaining agency information systems (automated or manual).
- *Records Management.* Managing physical document files (maps, microfiche, manual files, etc.).

Agency Workforce

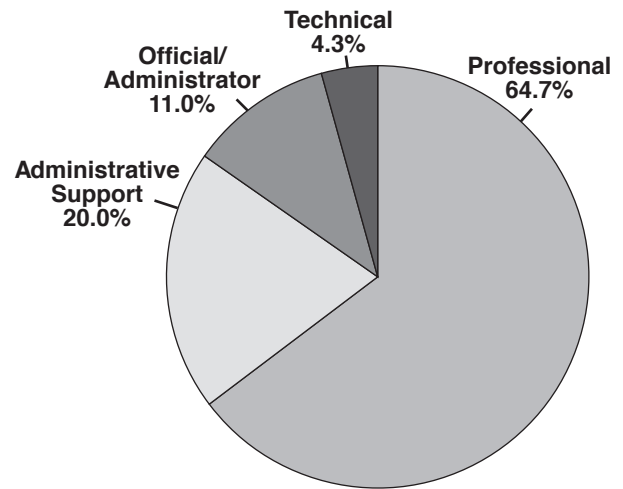
Size and Composition

The TCEQ had an authorized workforce of 2,761.2 budgeted full-time equivalent (FTE) positions for fiscal year 2013. As of Aug. 31, 2013, the average age of TCEQ employees was 46.4 years, compared to 46.2 years as reported in the *Strategic Plan: Fiscal Years 2013–2017*. The largest age group was that of 50 to 59 (28.3% of the total workforce). The average employee tenure with the agency was 10.4 years, a minor increase from the 10.2 years reported in the previous strategic plan. Twenty-six percent of employees had over 15 years of TCEQ service. The average tenure with the State of Texas was 13.4 years.

The average tenure for all EEOC job categories remained relatively unchanged since fiscal 2011. The TCEQ employs staff from four EEOC job categories. Professionals make up 65 percent of the entire agency

workforce; however, this group has the least amount of agency tenure. The remaining workforce consists of officials/administrators, technical personnel, and administrative support personnel. Officials/administrators have the longest average tenure, at almost 14 years of agency service. (See Table 2.)

Figure 1.
TCEQ Workforce by EEOC Job Categories, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Table 2. Average Tenure of TCEQ Workforce by EEOC Job Categories

EEOC Job Category	Average Tenure (in years)
Official/Administrator	13.9
Professional	9.8
Technical	11.4
Administrative Support	10.0

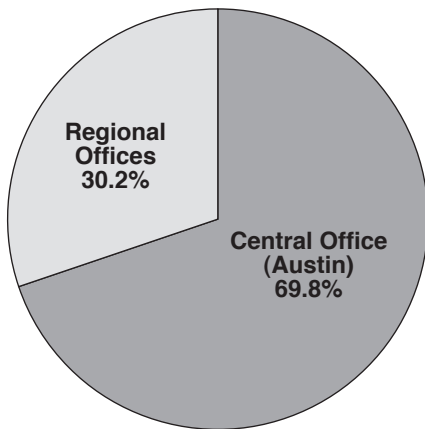
Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

The TCEQ supplemented its workforce in fiscal 2013 with a total of 62 contracted staff in order to provide vital program support, manage workloads, and perform various information technology functions as a means for meeting agency goals and objectives.

Location of Employees

The TCEQ employs staff in the Central Office, located in Austin, and in 16 regional offices and 5 satellite offices throughout Texas. As of Aug. 31, 2013, 784 employees—or 30.2 percent of the total workforce—were located in the regional offices (see Figure 2). In an effort to facilitate delivery of agency services at the point of contact and to increase efficiencies, 110 (14.0%) of the regional employees were matrix-managed staff who work in a regional office but are supervised from the Central Office.

Figure 2.
TCEQ Employees by Location, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Human Resources Policies and Procedures

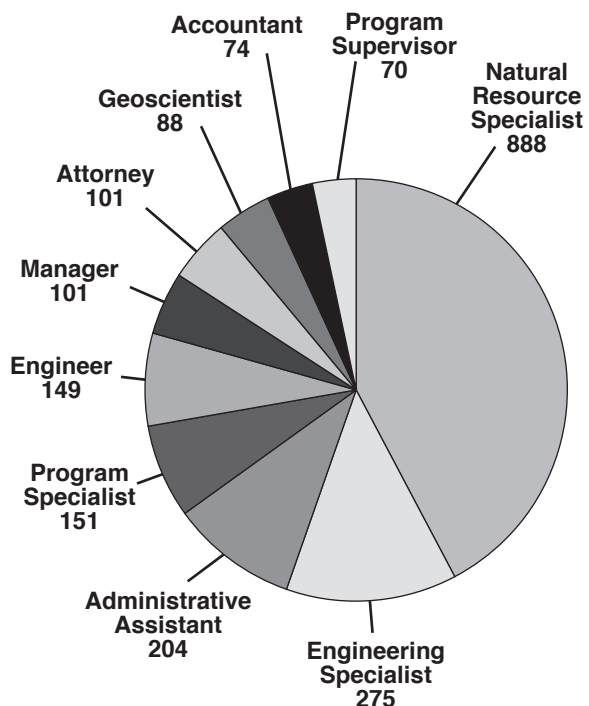
The Human Resources and Staff Services (HRSS) Division of the TCEQ administers the agency’s workforce through routine review and revision of human resources (HR) policies and procedures, ensuring compliance with state and federal laws on equal opportunity and fair labor practices, and offering policy guidance to employees. Legislative changes are incorporated into HR policies and standard operating procedures, as necessary, every two years. The next regular legislative session will begin Jan. 13, 2015.

Frequently Used Job Classifications

The TCEQ uses a wide variety of job classifications to carry out its mission of protecting our state’s human and natural resources. The 10 most frequently used job classification series in fiscal 2013, displayed in Figure 3, were:

- Natural Resource Specialist (888)
- Engineering Specialist (275)
- Administrative Assistant (204)
- Program Specialist (151)
- Engineer (149)
- Manager (101)
- Attorney (101)
- Geoscientist (88)
- Accountant (74)
- Program Supervisor (70)

Figure 3.
TCEQ Employees by Job Classification Series, FY 2013



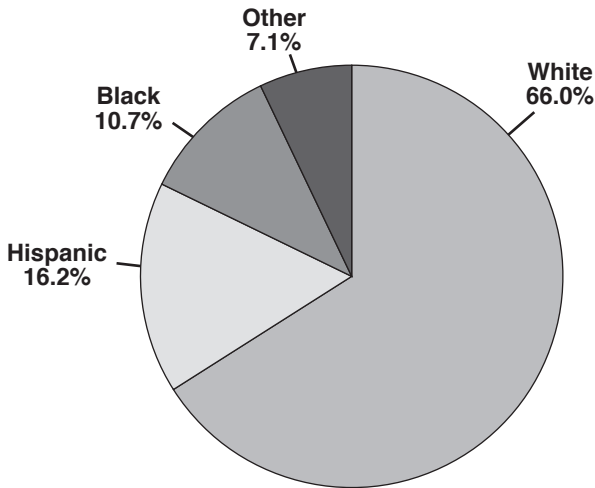
Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Equal Employment

It is the policy of the TCEQ to provide equal employment opportunities to all employees and qualified applicants, regardless of race, color, religion, national origin, sex (including pregnancy), sexual orientation, age, disability, veteran status, genetic information, or other status protected by law. In addition, all employees are provided equal employment opportunity training to increase their awareness of state and federal employment laws and regulations.

In fiscal 2013, Blacks and Hispanics represented almost 27 percent of the agency’s workforce, with other ethnic groups constituting over 7 percent. See Figure 4 for the ethnicity of the TCEQ workforce in fiscal 2013.

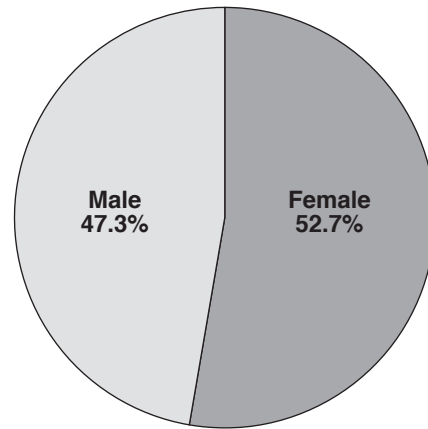
**Figure 4.
TCEQ Employees by Ethnicity, FY 2013**



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

In fiscal 2013, the TCEQ workforce was 47.3 percent male and 52.7 percent female. These percentages indicate a slight change from the last reporting period of fiscal 2011 (males, 48.6%; females, 51.4%). Currently, the available State of Texas workforce for males is 54.3 percent; and for females, 45.7 percent. See Figure 5 for the gender of the TCEQ workforce in fiscal 2013.

**Figure 5.
TCEQ Employees by Gender, FY 2013**



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Agency Workforce Compared to Available Statewide Civilian Workforce

Table 3 illustrates the agency’s workforce as of Aug. 31, 2013, compared to the available statewide civilian labor force as reported in the January 2013 *Equal Employment Opportunity and Minority Hiring Practices Report*, a publication of the Civil Rights Division of the

Table 3. TCEQ Workforce Compared to Available Statewide Labor Force, 8/31/13

EEOC Job Category	Black		Hispanic		Female	
	SLF	TCEQ	SLF	TCEQ	SLF	TCEQ
Official/Administrator	9.0%	6.5%	19.5%	15.2%	39.3%	41.6%
Professional	11.3%	8.5%	17.4%	13.8%	59.1%	46.0%
Technical	14.2%	8.8%	21.4%	14.4%	41.5%	29.6%
Administrative support	13.6%	20.7%	30.5%	24.8%	65.6%	85.3%

Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Texas Workforce Commission. This table provides information by prescribed categories on Blacks, Hispanics, and females within the available statewide labor force (SLF) and the TCEQ workforce. The TCEQ employs staff from four employee job categories.

Although minorities and females are generally well represented at the TCEQ, the agency’s ability to mirror the available SLF in EEOC job categories remains difficult. Although slight gains were realized in the agency’s Hispanic population, the TCEQ continues to experience under-representation in Blacks and Hispanics in almost all job categories. The agency maintains efforts to mirror the state’s female population in the professional and technical job categories, as well. The agency will continue to strive to employ a labor force representative of the available Texas workforce.

Recruitment and Retention

The purpose of the TCEQ recruitment and retention efforts is to identify, recruit, and retain a multitalented and culturally diverse workforce representative of the state’s available labor force. The agency workforce is largely composed of staff in science, technology, engineering, computer science, administrative support, and other related fields.

The TCEQ is fortunate to have one of the lowest turnover rates among state agencies, with a turnover rate of 12.0 percent in fiscal 2013—well below the statewide turnover of 17.6 percent. While this low rate can be attributed to agency retention efforts and a recovering economy, this is the highest turnover rate for the agency since fiscal 2008.

Retirements and competition for skilled applicants will present challenges to our goal of maintaining a diverse, well-qualified workforce. In an effort to address these indicators, the agency is emphasizing workforce and succession planning. This process involves building a viable talent pool that contributes to the current and future success of the agency, including the need for experienced employees to impart knowledge to their potential successors, as required by Section 2056.0021, Texas Government Code.

With over 1,000 TCEQ employees becoming eligible to retire by the end of fiscal 2019, the agency faces the possibility of a substantial loss of skill and institutional knowledge. This will be particularly critical in management, technical, and program area positions where the loss of the expertise, special skills, and knowledge of experienced staff could significantly affect the delivery of agency programs. Table 4 shows the number of retirements from the agency for fiscal years 2009 through 2013. This is a 20 percent increase from what was reported in the *Strategic Plan: Fiscal Years 2013–2017*.

Table 4.
TCEQ Employee Retirements, FYs 2009–2013

Fiscal Year	Number of Retirees
2009	55
2010	67
2011	84
2012	87
2013	98
Total	391

Data Source: Texas Uniform Statewide Accounting System, as of 1/31/14.

Potential changes to the State of Texas’ retirement and benefit plan may affect future retirement decisions, as well as recruiting efforts.

On a broad scale, the TCEQ is committed to developing its employees and promoting employee advancement and initiative through career ladders. A career-ladder program was implemented in 1995. To date, career ladders have been established for 21 occupational specialties, with 57 percent of non-management employees on career ladders. The establishment of structured career progression reflects the agency’s business needs and benefits the employees by providing them defined career advancement opportunities.

The TCEQ continues preparing and developing the agency’s future leaders with the Aspiring Leaders Program (ALP). This program provides identified non-supervisory staff with access to training and development opportunities to help prepare them for eventual progression into management positions. Participants are required to complete a summary portfolio that showcases the completed requirements of the ALP, such as participation in the legislative process, management training, and an internal project.

Training

The TCEQ places a strong emphasis on enhancing the technical and professional skills of employees. Agency training needs are assessed annually.

The agency seeks to use emerging technologies—such as computer-based training, Internet-based training, video conferencing, and webcasting—whenever feasible.

Challenges and Opportunities

The TCEQ anticipates challenges as it proceeds to fulfill its mission and goals. Economic, environmental, and political trends indicate that the agency will experience program changes, process redesign initiatives, and technological advancements. New state and federal mandates, as well as internal initiatives, will be challenging in the face of budget and FTE constraints. Technical requirements are expanding and a comprehensive knowledge of agency procedures and federal regulations, as well as computing and analytical abilities, is critical.

With the potential for the loss of technical skills and institutional knowledge, the spotlight will be on workforce and succession planning as a mechanism for getting staff to assume important functions and leadership roles. In addition, the use of effective strategies will play a big role in preparing for skill gaps. Since the agency employs staff who are highly marketable in the private sector, recruitment and retention is often difficult. The agency will continue to work toward maintaining and retaining the workforce that is vital to meeting the mission, goals, and objectives of the TCEQ.

Organizational Structure

Recent Changes

When the TCEQ was first established, as the TNRCC (Texas Natural Resource Conservation Commission), the agency was organized according to the programs it regulates: air, water, and waste.

More than 10 years ago, in 1999, the agency moved from a programmatic organizational structure to a functional one. This change was made to establish greater uniformity in procedures and decision making, provide cross-training opportunities for staff in the various programs, and align planning and permitting activities. Over time, that consistency between the various permitting programs has been achieved and is now institutionalized.

During the last several years, however, the agency recognized the benefits of changing the structure again, moving it from an exclusively functional one toward one that incorporates elements of a programmatic structure.

While the move to a functional organizational structure had its advantages, it also generated challenges. One of the most significant challenges was the loss of specific staff with expertise in the various programs under TCEQ jurisdiction. In response to these challenges, the agency began instituting changes to its organizational structure.

The first change, undertaken in December 2009, was the establishment of an Office of Water. Subsequent changes were made in June 2011, when an Office of Air and an Office of Waste were created.

These three offices, with responsibility for specific program areas, will maximize the appropriate use of staff’s knowledge and expertise in a given program area. These changes in the agency’s organizational structure will enhance the agency’s efforts to be responsive to the regulated community. It will also facilitate the agency’s communication with a public that understands environmental concerns in program-specific terms.

The TCEQ is a relatively mature agency, having gone through two successful reviews by the Sunset

Advisory Commission. As a result of the most recent Sunset Advisory Commission review of the Public Utility Commission and actions of the 83rd Legislature, the regulation of water and wastewater utilities will transfer from the TCEQ to the PUC on Sept. 1, 2014. The TCEQ and PUC have worked together in fiscal 2014 to prepare for and execute the transfer of the associated regulatory programs. The transfer is outlined in and governed by a memorandum of understanding between the TCEQ and PUC.

The agency is always open to adjusting its organizational structure in response to changed priorities and identified efficiencies. The current organizational structure is not set in stone and will be modified as needed to improve the agency's ability to fulfill its responsibilities.

Current Organization

At the top of the operating structure of the TCEQ are the offices of the commissioners. The executive director reports to the commissioners, with several divisions lending direct support. The agency's primary environmental programs and administrative offices are represented by six major offices, all of which have broad responsibilities. Under each of those offices are divisions with clearly defined duties.

Commissioners

Three full-time commissioners are appointed by the governor to establish overall agency direction and policy, and to make final determinations on contested permitting and enforcement matters. The following four offices report directly to the commissioners:

- General Counsel
- Chief Auditor
- Chief Clerk
- Public Interest Counsel

The commissioners are appointed for six-year terms with the advice and consent of the Texas Senate. A commissioner may not serve more than two six-year terms, and the terms are staggered so that a different member's term expires every two years. The governor also names the chairman of the commission.

Bryan W. Shaw, Ph.D., P.E., of Elgin, serves as chairman. He was appointed on Nov. 1, 2007. Toby Baker, of Austin, was appointed effective April 16, 2012. Zak Covar, of Austin, was appointed on Jan. 10, 2014.

Executive Director

The executive director, who is hired by the commissioners, is responsible for managing the agency's day-to-day operations. Major responsibilities include directing the operations of 17 statewide offices, implementing commission policies, making recommendations to the commissioners about contested permitting and enforcement matters, and approving uncontested permit applications and registrations.

The deputy executive director serves as the chief operating officer to assist the executive director in the administration of the agency.

Six office clusters report to the executive director. Each office is headed by a deputy director. These deputies are responsible for administering our regulatory and administrative programs.

- Office of Administrative Services
- Office of Air
- Office of Compliance and Enforcement
- Office of Legal Services
- Office of Waste
- Office of Water

One program and four divisions report directly to the executive office:

- Take Care of Texas program
- Agency Communications
- Intergovernmental Relations
- Small Business and Environmental Assistance
- Toxicology

Office of Administrative Services

The Office of Administrative Services serves and supports agency personnel and external customers, supplying the essential administrative infrastructure required to maintain business operations. Services include:

- Budget and financial administration.
- Human-resources management and staff development.

- Information technology.
- Records management.
- Management and support of assets, physical property, and the Procurement and Contracting and Historically Underutilized Business programs.

Office of Air

The Office of Air oversees all of our air permitting activities. The office also implements plans to protect and restore air quality in cooperation with local, regional, state, and federal stakeholders, and tracks progress toward environmental goals, adapting plans as necessary. The office does this through two major divisions:

- Air Permits
- Air Quality

The Air Permits Division processes air permits and authorizations for facilities that, when operational, would emit contaminants into the atmosphere. The division does this through two major air permitting programs:

- New Source Review (NSR) Permits
- Title V Federal Operating Permits

The Air Quality Division works to protect and restore air quality through four programs:

- Air Implementation Grants
- Air Industrial Emissions Assessment
- Air Modeling and Data Analysis
- Air Quality Planning

Office of Compliance and Enforcement

The Office of Compliance and Enforcement enforces compliance with the state’s environmental laws, responds to emergencies and natural disasters that threaten human health and the environment, oversees dam safety, and monitors air quality within Texas. In addition, it oversees the operations of the 16 regional offices across the state and one special-project office.

Office of Legal Services

The Office of Legal Services manages legal services for the agency in environmental law, enforcement

litigation, bankruptcy, and general agency operations. The office gives legal counsel and support to the executive director, the agency programs, and—along with the general counsel and the public interest counsel—the commissioners. The office ensures that commission decisions follow the law, and that rules we develop comply with statutory authority and are applied consistently.

Office of Waste

The Office of Waste implements federal and state laws related to the regulation of aboveground and underground petroleum storage tanks (PSTs); the generation, treatment, storage, and disposal of municipal, industrial, low-level radioactive, and hazardous wastes; and the recovery and processing of uranium and the disposal of by-product material. It also oversees state cleanup of contaminated sites.

Office of Water

The Office of Water works toward clean and available water and is responsible for all aspects of planning, permitting, and monitoring to protect the state’s water resources. The Office of Water is responsible for the implementation of the following major programs:

- Public Drinking Water
- Water Rights
- Interstate River Compacts
- Watermaster
- Districts and Utilities
- Groundwater Protection
- Texas Surface Water Quality Standards
- Nonpoint Source Program
- Wastewater, Stormwater, and Concentrated Animal Feeding Operation Permitting
- Surface Water Quality Monitoring
- Watershed Protection Plans and Total Maximum Daily Loads
- Galveston Bay Estuary Program

Geographic Aspects

Location of the Agency

The headquarters of the Texas Commission on Environmental Quality is located at 12100 Park 35 Circle, Austin, TX 78753. Consistent with the TCEQ's statewide mission, there are sixteen regional offices located throughout the state.

Agency Headquarters

The TCEQ's central office complex, on 30 acres, includes six buildings. Five buildings (377,109 sq. ft.) are state owned, while the sixth (167,074 sq. ft.) is leased from a private owner. Combined, all six buildings account for approximately 544,183 square feet of office and laboratory space, along with parking to accommodate 2,095 vehicles. Elsewhere in Austin, the TCEQ has a leased warehouse of 10,964 square feet and an emissions testing facility of 2,000 square feet.

Regional Offices

The TCEQ has 16 regional offices:

1. Amarillo ~ 3918 Canyon Dr.,
Amarillo, TX 79109-4933
2. Lubbock ~ 5012 50th St., Ste. 100,
Lubbock, TX 79414-3426
3. Abilene ~ 1977 Industrial Blvd.,
Abilene, TX 79602-7833
4. Dallas-Fort Worth ~ 2309 Gravel Dr.,
Fort Worth TX 76118-6951
5. Tyler ~ 2916 Teague Dr., Tyler, TX 75701-3734
6. El Paso ~ 401 E. Franklin Ave., Ste. 560,
El Paso, TX 79901-1212
7. Midland ~ 9900 W. IH-20, Ste. 100,
Midland, TX 79706
8. San Angelo ~ 622 S. Oakes, Ste. K,
San Angelo, TX 76903-7035
9. Waco ~ 6801 Sanger Ave., Ste. 2500,
Waco, TX 76710-7826
10. Beaumont ~ 3870 Eastex Fwy.,
Beaumont, TX 77703-1830
11. Austin ~ 12100 Park 35 Circle, Bldg. A,
Rm. 179, Austin, TX 78753-1808

12. Houston ~ 5425 Polk St., Ste. H,
Houston, TX 77023-1452
13. San Antonio ~ 14250 Judson Rd.,
San Antonio, TX 78233-4480
14. Corpus Christi ~ 6300 Ocean Dr., Ste. 1200,
Unit 5839, Corpus Christi, TX 78412-5839
15. Harlingen ~ 1804 W. Jefferson Ave.,
Harlingen, TX 78550-5247
16. Laredo ~ 707 E. Calton Rd., Ste. 304,
Laredo, TX 78041-3887

The total space occupied by the regional facilities, excluding the Austin regional office (located on the main campus), is 235,431 square feet. This square footage includes space occupied by the primary regional offices listed above; smaller office spaces in Stephenville, Eagle Pass, and Webster, the latter housing the Galveston Bay Estuary Program; storage facilities in Beaumont and San Angelo; and the TCEQ's laboratory in Houston.

Accessibility

TCEQ-occupied facilities are compliant with the provisions of the Americans with Disabilities Act.

Affected Populations

As the state's environmental agency, the TCEQ protects human and natural resources (air, water, land). Through this mission, and using the 16 regional offices, all of the state's population and businesses are affected either directly or indirectly by the agency's activities. The TCEQ does, however, have programs that specifically operate in border areas of the state, particularly in the Texas-Mexico Border area.

Special Regions Served

The TCEQ has special programs that affect the Texas border region with Mexico and the Texas-Louisiana border region.

Texas and Louisiana Border Area

The Caddo Lake watershed is a rich and unique ecosystem that straddles the Texas-Louisiana border. The Louisiana Department of Environmental Quality (LDEQ) and the TCEQ coordinate water quality monitoring along the Sabine River and in Caddo Lake and Toledo Bend Reservoir.

Water Quality Monitoring and Standards for Caddo Lake, Toledo Bend Reservoir

Both the LDEQ and the TCEQ coordinate water quality monitoring along the Sabine River and in Caddo Lake and Toledo Bend Reservoir. On June 30, 2010, the TCEQ adopted new numerical criteria for nutrients for 75 reservoirs in Texas, in order to protect these water-supply sources from excessive growth of aquatic vegetation. The EPA approved the majority of these criteria in an action letter dated July 2, 2013. Similar criteria for Caddo Lake and Toledo Bend Reservoir are also needed, and the staff of the TCEQ and the LDEQ are coordinating to develop joint criteria that are compatible with the water quality management programs of both states.

The TCEQ's most recent revision to the Texas Surface Water Quality Standards was adopted by the commission on Feb. 12, 2014. The TCEQ did not propose or adopt any revisions to uses or criteria specifically assigned to Caddo Lake or Toledo Bend Reservoir during this revision cycle.

Red River Nutrient Criteria Project

Texas participated in a joint study with several states to develop numerical nutrient criteria that could be used to assess and control excessive growth of aquatic vegetation in the Red River. As a downstream state on the Red River, Louisiana was a participant in this study, as were New Mexico, Arkansas, and Oklahoma. Under an EPA grant that was coordinated by the University of Arkansas, data from the participating states were consolidated in order to (1) assess existing nutrient conditions along the river and (2) evaluate nutrient criteria for

possible addition to the individual states' water quality standards. This study was completed in 2012, and its results are based on shared data from participating state monitoring programs.

Sabine River Compact

Texas has five interstate river compact commissions. These commissions respectively ensure that the State of Texas receives 100 percent of its equitable share of the waters of the Canadian, Pecos, Red, Rio Grande, and Sabine rivers and their tributaries, as allocated by the appropriate interstate compact. The TCEQ provides technical support to the compact commissioners. Legal support is provided by the Office of the Attorney General. The Sabine River marks much of the border between Texas and Louisiana. Water from the Sabine River is apportioned and each state's share is protected by the Sabine River Compact. Texas' obligation under the Sabine River Compact requires Texas to maintain minimum flows at the United States Geological Survey gage on the Sabine River near Beckville.

Texas experienced severe drought conditions beginning in 2011. As part of the technical support for the Sabine River Compact, the TCEQ closely monitors flow at the Beckville gage.

Texas and Mexico Border Area

The Texas border region with Mexico presents unique characteristics compared to the rest of the state. What otherwise might be only "local" problems are often complicated by causes and effects that cross international and state boundaries. Texas communities in this region are located in an international watershed (the Rio Grande) and air basins shared with Mexico and the state of New Mexico, and this interdependence requires the TCEQ to develop and maintain relationships with Mexican and other partners at every level to address problems effectively.

Since December 2008, the TCEQ has implemented the Border Initiative, a comprehensive, cooperative effort to serve border residents. The TCEQ Border Initiative is a regularly updated document that lists TCEQ programs and accomplishments in the border

region. The *Border Initiative* publication can be found on the TCEQ’s website at <www.tceq.texas.gov/goto/border>. As part of the Border Initiative, since 2009 the TCEQ has signed memoranda of cooperation with the environmental agencies of three neighboring Mexican states. The latest of these memoranda was with the Secretariat of Environment of Coahuila, in 2013.

The TCEQ carries out many activities in the Texas border region with Mexico. This area makes up 27 percent of Texas and is covered by six regional agency offices. This section provides an overview as well as challenges, planned activities, and accomplishments for this region with regard to water resources, waste management, air quality, and natural resources.

Economic and Social Issues

The border-region economy is diverse, with agriculture and ranching, oil and gas production, trade and commerce, industry (particularly maquiladoras, Mexican assembly plants), and tourism playing key parts. The annual influx of “Winter Texans”—residents of Midwestern and Northern U.S. states who move to the Lower Rio Grande Valley and other parts of the region for the winter months—also plays a significant role in the economy. In the past few years, the economy in the border counties of Maverick, Zavala, Frio, Dimmit, La Salle, Webb, and McMullen has markedly improved, due to oil and gas exploration and production in the Eagle Ford Shale.

The population of the 32 counties in the Texas border region, stretching from El Paso to Brownsville, was estimated to be more than 2.7 million, as of January 2013. While the region contains some of the fastest-growing metropolitan areas in the United States—the population-growth rate of the Texas border region is twice that of Texas as a whole—poverty in some border communities is also among the highest in the nation. According to 2012 census figures, seven Texas border-region counties are among the poorest 100 counties (out of 3,198) in the United States; Starr County’s 43.6 percent poverty rate makes it the 11th poorest county in the nation.

Rapid industrial growth and population increases on the Mexican side of the border also affect Texas’ border environment. Much of this growth is due to economic factors that encourage many Mexicans to migrate to border cities in search of jobs. As of October 2013, there were 1,915 maquiladoras in the four Mexican states bordering Texas, directly employing or subcontracting 909,000 people. Many Mexican workers are attracted to the border because of maquiladoras, the overall better economy of the border states, and the proximity to the United States.

Infrastructure

Rapid population growth on both sides of the Rio Grande has meant increased demands on the capacity to treat drinking water, as well as to treat wastewater and dispose of solid waste. The ability to pay for this environmental infrastructure is fundamental to environmental quality and the well-being of residents. Elevated poverty and unemployment levels create a low tax base, which in turn can worsen pollution, either because of inadequate infrastructure or reduced ability to operate and maintain existing infrastructure.

Colonias—unincorporated communities lacking one or all of the basic services—represent infrastructure challenges in the border region. Approximately 2,000 economically distressed areas in the border area of Texas are home to some 400,000 residents. Most colonias are rural, often lacking paved roads, garbage pick-up, drainage, and water and wastewater services; a 2010 report by the Texas Secretary of State found that 171,000 colonia residents in the largest border counties still lacked water or sewer service or both. However, many colonia residents have received basic services through programs of state and federal agencies.

Water Resources

Background

As the current drought in Texas has shown, water availability is critical throughout the state. It is especially so in the border region of Texas and its neighboring Mexican states, where annual rainfall

varies between seven inches in El Paso–Ciudad Juárez and 25 inches in Brownsville–Matamoros.

Surface and groundwater supplies are essential for sustaining economic development. While two large international dams on the Rio Grande–Falcon and Amistad, built in 1954 and 1968, respectively—greatly improved the reliable supply of water for agricultural and domestic uses, groundwater continues to be important.

Surface Water

The Rio Grande is the principal river in the region, with major tributaries in both the United States and Mexico. It begins in the San Juan Mountains of southern Colorado and ends 1,900 miles later, at the Gulf of Mexico. Another mountain source in Mexico’s Sierra Madre range forms the Río Conchos tributary, which historically provided more than three-quarters of the flow to the “Big Bend” of the Rio Grande and beyond. For 1,254 miles after entering Texas from New Mexico, the Rio Grande is the international boundary between the two nations. It drains a land area more than twice the size of California, including parts of three U.S. and five Mexican states and 19 tribal and pueblo lands.

Two international agreements (1906 and 1944) apportioned the waters of the Rio Grande between Mexico and the United States, with the latter creating the International Boundary and Water Commission (IBWC) to verify water distribution between the two nations. The TCEQ’s Rio Grande Watermaster allocates U.S. waters to Texas water-right holders from Ft. Quitman in Hudspeth County to the Gulf of Mexico; upstream of Ft. Quitman, the Rio Grande Compact Commission ensures water deliveries to Texas for the El Paso area.

Elephant Butte Reservoir in New Mexico provides water for New Mexico users and for Texas users in El Paso and Hudspeth counties, as well as Mexico’s allotted water under the 1906 agreement, normally 60,000 acre-feet a year. Most of this water is diverted, resulting in very little flow below Ft. Quitman, creating a “Forgotten River” stretch between El Paso and Presidio. In August 2011, New Mexico filed litigation in federal district court against the Bureau of Reclamation. This

litigation is an effort by New Mexico to reduce water deliveries to Texas users from Elephant Butte Reservoir. In January 2013, the State of Texas filed a complaint with the U.S. Supreme Court asking the court to command New Mexico to deliver water apportioned to Texas under the 1938 Rio Grande Compact. On Jan. 27 2014, the U.S. Supreme Court ruled that Texas could proceed with its complaint.

Groundwater

Groundwater is used in much of the border region. In the El Paso–Ciudad Juárez area, it provides most of the water that is destined for municipal use. Several aquifers are shared between Mexico and the United States, with perhaps the best known being the Hueco Bolsón, from which both El Paso and Ciudad Juárez pump water. Groundwater is also the water source for Del Rio, Texas, as well as for other areas, such as portions of the Lower Rio Grande Valley, where desalination has made groundwater use possible.

Challenges

Surface Water

Amistad and Falcon reservoirs on the Rio Grande are upstream of Del Rio and Roma, respectively. While valued for recreation and related economic development, their primary uses are water supply and flood control. At a combined storage capacity of 6.05 million acre-feet of water, 3.46 million acre-feet belong to the United States. During the 1995–2002 low-flow period in the Rio Grande basin, mainly due to decreased releases from reservoirs in Mexico, both reservoirs dropped to their lowest levels since the record drought of the 1950s.

As previously stated, the main source of water for the two reservoirs is Mexico’s Río Conchos, the largest Rio Grande tributary. Beginning in the State of Durango, it drains much of Chihuahua before entering the Rio Grande at Ojinaga and Presidio, Texas. Under the 1944 Water Treaty, one-third of the water of the Conchos and five other Mexican tributaries belongs to the United States and shall “not be less, as an

average amount in cycles of five consecutive years, than 350,000 acre-feet annually.” The current cycle started Oct. 25, 2010, after U.S. capacity in both reservoirs was 100 percent due to hurricanes and tropical storms that helped fill both reservoirs; however, as of Feb. 1, 2014, combined U.S. storage capacity in Amistad and Falcon reservoirs had decreased to 43.6 percent, down from 62.5 percent on Feb. 18, 2012.

Starting with the five-year cycle that ended in 1997, Mexico incurred a 1.5 million acre-feet Rio Grande water debt for not providing water to the United States under the terms of the 1944 treaty. The water debt created bilateral problems for many years, reaching the highest levels of government in the two nations before eventually being resolved in 2005. The absence of a definition of the term “extraordinary drought” in the treaty added to the difficulties. Subsequent to the resolution of the “water debt,” extreme flooding occurred in 2008 within the Rio Conchos basin, filling all Mexican reservoirs as well as Falcon and Amistad. For the five-year cycle that began Oct. 25, 2010, as of May 3, 2014, Mexico is already behind on its water deliveries by more than 333,000 acre-feet. More information on the current water deficit can be found at <www.tceq.texas.gov/goto/borderwater>.

Groundwater

The shared Hueco Bolsón aquifer from which both El Paso and Ciudad Juárez pump water is essentially not being recharged. In addition, the State of Chihuahua is pursuing increased use of the Mesilla Bolsón that it shares with New Mexico for municipal use in Ciudad Juárez, which relies entirely on groundwater for its water supply. El Paso uses a combination of groundwater and Rio Grande surface water for its water supply.

Actions and Accomplishments

Surface Water

In October 2007, Mexico transferred Rio Grande reservoir water to the United States, ensuring the

closure of a treaty cycle without a deficit for the first time in fifteen years; water levels in the combined Amistad-Falcon reservoir system were at their highest in more than a decade.

However, because Mexico has once again fallen behind on Rio Grande water deliveries, the agency has again had to work with local border stakeholders to press the Mexican government to provide Rio Grande water. Texas and the other nine border states agreed at the 2012 Border Governors Conference on a declaration requiring the International Boundary and Water Commission, U.S. and Mexico, to provide an annual update on compliance with water treaties between the two countries.

The TCEQ has raised the issue of lagging Rio Grande water deliveries by Mexico to the U.S. Department of State and continues to work with state and federal elected officials to ensure that Texas obtains its water under the 1944 Water Treaty.

Groundwater

Recent studies have characterized the quantity and quality of the different portions of the Hueco Bolsón in El Paso, showing that it could provide fresh water for nearly a century. While Mexico and the United States currently have no agreement on sharing underground aquifers, both countries are required by Minute 242 of the IBWC to “consult with each other prior to undertaking any new development of either the surface or the groundwater resources . . . in its own territory that might adversely affect the other country.”

Waste Management

Background

International Waste Issues

Maquiladora waste currently does not present a problem for Texas capacity, but the TCEQ continues to track this issue. Mexican law requires that waste generated by maquiladoras be returned to the country of origin, and under the La Paz Agreement the United States must accept it. The volume of municipal solid waste (MSW) shipped from Mexico to Texas

has dropped sharply in recent years, decreasing from 48,000 tons in fiscal 2004 to 4,200 tons in 2006, to 1,634 tons in 2012. Data show that in calendar year 2013, 405 tons of hazardous waste and 994 tons of Class 1 nonhazardous waste (1,399 total tons) were shipped from Mexico to facilities in Texas, which represents a slight increase from previous years.

There have been concerns expressed in years past about whether there was a disproportionately high number of facilities treating, storing, or disposing of hazardous and nonhazardous waste in the border region, compared to the rest of state. Currently, there are no facilities treating hazardous waste in the border and 32 MSW landfills in the 32 counties included in the border region.

Domestic Waste Issues

Councils of Governments (COGs) develop Regional Solid Waste Management Plans. Five COGs cover the great majority of the border region’s population.

Challenges

Border MSW Disposal

Border COGs face common problems. Access to and affordability of proper MSW collection and disposal systems continues to pose problems, particularly in rural areas. Illegal dumping also often occurs in rural areas and colonias, where municipal solid waste collection and disposal is frequently unavailable, inadequate, or costly. Outdoor burning is common, creating risks to public health and environmental quality. Additionally, improper scrap-tire disposal is a frequent complaint among border communities.

Actions and Accomplishments

International Waste Issues

Maquiladora waste currently does not present a problem for Texas capacity, but the TCEQ continues to track this issue. The EPA and its Mexican counterpart, SEMARNAT, exchange reports every six months on border hazardous waste disposal facilities, with the TCEQ providing input for these “Consultative Mechanism”

reports. Spent lead-acid batteries have taken on greater interest in the past two years as a binational waste issue.

MSW Disposal

Solid waste planners use “years of capacity remaining” as a benchmark for municipal solid waste landfills. The most recent annual report on municipal solid waste in Texas establishes the statewide average of 57 years of capacity remaining (as of Aug. 31, 2012). However, the same report lists three of the five border-region COGs as below the average, at 11, 24, and 50 years of capacity remaining. While the COG with only 11 years of average capacity in its area is the South Texas Development Council—which comprises Webb, Zapata, Jim Hogg, and Starr counties—with the opening of a landfill in Webb County in 2013, the years of average capacity for this COG have increased.

Several measures have been taken to address problems such as illegal dumping. These measures include education and recycling programs, self-help programs, and the identification and proposal of projects to federal entities.

Although illegal dumping of scrap tires continues to be a statewide issue, many border residents complain that it is worse in the border area and that they have inadequate resources to dispose of the tires.

The Texas disposal rate rose to 6.37 pounds per person per day in 2012, up slightly from 6.15 pounds in 2011. Recycling can reduce waste going to landfills. In the border region, the County of Zapata and the cities of El Paso, Alpine, Eagle Pass, Laredo, Alton, Edinburg, McAllen, Pharr, and San Benito all maintain recycling programs. In January 2014, Brownsville celebrated the third anniversary of its ban on plastic bags, and other border cities are considering following its example.

Air Quality

Background

Under the federal Clean Air Act, the EPA established standards for six criteria pollutants based on potential

effects of ambient concentration levels of pollutants on public health. The EPA may designate a geographical area not in compliance with one of these standards as “nonattainment.” In the Texas border region, air quality attainment issues have been experienced mainly in El Paso.

Challenges

Throughout the 1990s and the early part of the first decade of the 2000s, El Paso was in nonattainment for three criteria pollutants: ozone, carbon monoxide, and particulate matter. El Paso shares its airshed with Ciudad Juárez, in Chihuahua, and parts of New Mexico. This means that air pollution generated in any one of these jurisdictions can affect the others, and cooperation is necessary in order to improve air quality. Cross-border collaboration and TCEQ activities have indeed resulted in improvements (see below), and the city is now in attainment for ozone, carbon monoxide, and PM_{2.5}, with just PM₁₀ remaining in nonattainment.

For a brief period, there were concerns about the EPA standards being lowered, which might put El Paso in nonattainment for ozone. However, on Sept. 22, 2011, the EPA decided to retain the 2008 ozone standard of 0.075 parts per million: it will not be proceeding with the 2011 ozone standard at this time. The 2013 design value for El Paso was 0.072 parts per million. Design values are a three-year average, and this most recent figure shows that El Paso was below the federal ozone standard from 2011 through 2013. The TCEQ will continue to work with local organizations in El Paso to maintain the monitored ozone values below the standard, which was set in 2008. The latest federal review of the standard is scheduled to be completed this year.

Actions and Accomplishments

The need to work with partners in Mexico and New Mexico was addressed through the creation in 1996 of the binational Joint Air Quality Advisory Committee for the Improvement of Air Quality in the El Paso–Ciudad Juárez–Doña Ana County Air Basin. The JAC, as it is known, is structured to include members from

both federal governments, the two U.S. states and Chihuahua, and the three local governments, plus representatives of the private, academic, and nonprofit sectors.

The TCEQ provides administrative support to, and participates actively in, the JAC to improve air quality in the Paso del Norte region. The agency has consulted with the other JAC members on the development of emission-reduction programs in El Paso and has given advice to them with regard to policies and actions meriting consideration in the other jurisdictions. The activities carried out in El Paso have included a vehicle inspection and maintenance program and the use of seasonal fuels. These activities resulted in measured reductions of concentrations of the three pollutants in El Paso. With this improvement, the EPA redesignated the area in recent years to the status of attainment for both ozone and carbon monoxide and actions are being taken to obtain redesignation for particulate matter. The JAC is viewed as a model of binational environmental cooperation.

Natural Resources

Background

The border region has two national parks and several other important recreational or protected areas in the border region. Guadalupe Mountains and Big Bend are the national parks. Big Bend and the Cañón de Santa Elena and Maderas del Carmen protected areas across the river in Mexico form a biosphere reserve. Two National Wildlife Refuges in the Lower Rio Grande Valley are well known for their bird-watching opportunities. Amistad National Recreation Area allows visitors to take advantage of excellent fishing. Texas also has 13 state parks or protected natural areas in the border region. The World Birding Center was created by the Texas Legislature in the Lower Rio Grande Valley to promote bird watching and eco-tourism.

Challenges

An issue in the region is visibility degradation, due to haze, in Big Bend and Guadalupe Mountains national parks. Panoramic views are considered critical for

national parks. The haze is created by multiple sources of pollution, both within and outside of Texas. Under the federal Clean Air Act, the EPA established rules for dealing with haze; however, the EPA recognizes that these complex circumstances mean that many years will be required to show the “reasonable progress” called for by the regulations.

Actions and Accomplishments

The TCEQ is working with the EPA, the National Park Service, and other U.S. states in a designated region to address this challenge. In February 2014, the commission adopted revisions to the Texas State Implementation Plan (SIP) for visibility protection in the two affected national parks.

Border 2020: Binational Border Environmental Program

In August 2020, the U.S. and Mexican federal and border state agencies and U.S. border tribes jointly developed Border 2020, a binational program with a bottom-up collaborative approach. A successor to the Border 2012 program, Border 2020 allows border residents to develop local environmental priorities by participating in Regional Work Groups (RWGs) along the U.S.–Mexico border. Two of the four RWGs include parts of Texas: the Texas–New Mexico–Chihuahua RWG and the Texas–Coahuila–Nuevo León–Tamaulipas (Four-State) RWG.

Under this program the TCEQ has cooperated extensively with the EPA, the Mexican federal environmental agency, binational institutions, other U.S. and Mexican border states, and local governments on both sides of the border. The agencies have identified shared environmental problems, exchanged information, and learned from each other’s experiences.

The Border Environment Cooperation Commission and the North American Development Bank, created under a U.S.–Mexico environmental side agreement to the NAFTA, provide critical resources in addressing the water-related objectives of Border 2020. They have assisted in the design of drinking-water and wastewater infrastructure for border-area

communities in Texas and Mexico, as well as provided financial assistance for its construction. In Texas, programs initiated in 1989 have continued to provide funding for similar infrastructure in colonias. As a result of all these efforts, water quality in the Rio Grande has improved.

Other accomplishments of local governments during the Border 2020 program have included an increase of local recycling programs, greater collection of household hazardous wastes and used electronic products, and updates developed for cross-border (sister-city) emergency response plans.

Other Water-Related Infrastructure

To increase water supplies, border communities have taken the lead in Texas in treating saline groundwater to make it potable. The TCEQ has worked with utilities in the Lower Rio Grande Valley and El Paso to permit drinking-water plants that treat brackish groundwater. The Southmost Regional Water Authority’s desalination plant in Cameron County went online in 2004 and now produces 7.5 million gallons per day (mgd) of water, and in 2007 El Paso Water Utilities and Fort Bliss dedicated the world’s largest inland desalination plant, with a 27.5 mgd capacity. In addition, the State of Texas is supporting the Brownsville Public Utility Board’s pilot project to desalinate seawater to make it potable, with eventual plans for a 27-mgd plant.

Brownsville also has a long-standing plan for a channel dam to provide additional surface water from the Rio Grande. In 2007 the 10 U.S. and Mexican border-state governors endorsed the channel dam, which is only awaiting Mexican federal approval for construction.

The TCEQ also participates with other agencies in work groups chaired by the Colonia Initiatives Coordinator of the Secretary of State to improve water- and wastewater-related conditions in colonias, including the Senate Bill 99 (80th Legislature, Regular Session) work group to track infrastructure in border colonias. The next report from this group is due in December 2014.

Organizational Aspects

Capital Assets and Improvements

Vehicles

Vehicles are used to support mission-related functions, including inspections, investigation of complaints, equipment transport, and emergency response. The TCEQ maintains a fleet of 391 vehicles—311 (80%) are assigned to regional offices, and the remaining 80 (20%) are in Austin.

The TCEQ’s current policy requires purchase of factory-equipped alternative-fuel vehicles (AFV) and hybrid vehicles whenever possible. There are 17 vehicles in the fleet capable of using both liquid petroleum gas (LPG) and gasoline. Gasoline-electric hybrids and vehicles equipped to use a gasoline-ethanol fuel blend (or E85), of which there were 54 and 149, respectively, in fiscal 2013, will eventually replace the older models that are equipped to use LPG and gasoline.

Consistent with the guidelines of the state’s Office of Vehicle Fleet Management, and as reflected in Table 5 below, the TCEQ has adopted a preferred vehicle replacement schedule, which would mean replacement on the order of 39 to 45 vehicles per year. Generally, however, the timing of replacements is also affected by factors beyond the schedule, including budget availability and vehicle performance.

Information Technology

Data Center Services

The data center services (DCS) vendor did not perform life-cycle replacements of computer servers and

storage for several years after the agency’s DCS contract commenced. This left the agency with a substantial fraction of its inventory considerably older than recommended in its life-cycle plan. In addition, the agency’s storage costs under the DCS contract have risen, while data storage requirements are increasing. Resuming a prudent life-cycle replacement schedule and providing adequate data storage will entail a substantial increase in the cost of the DCS capital project.

Enterprise Modernization

The agency participates in the statewide legacy replacement initiative, and has identified major application systems at risk due to the age of the programming technology on which they are based. We will propose a capital project to re-develop these systems using a contemporary software platform.

Geospatial Information Gateway

The agency’s database of the regulated entities, called the Central Registry, has greatly improved our ability to organize the information that the agency collects. However, many aspects of environmental quality, and the environmental effects of the activities of those regulated entities, are inherently locational. The agency has made extensive use of geospatial data and geographical information systems in some areas of its operations, but Central Registry has remained untouched.

As a consequence, users still cannot directly query Central Registry data through a map-based interface, and the most basic location data concerning the regulated entities are often inaccurate. The Geospatial

Table 5. Vehicle Replacement Goals

Vehicle Type	Purpose	Replacement Goals
Sedans and wagons	Staff or authorized passenger transport	9 years or 100,000 miles
Light trucks	Basic transport, light hauling	9 years or 110,000 miles
Passenger vans, SUVs	Staff or authorized passenger transport	9 years or 110,000 miles
Cargo vans	Cargo hauling	9 years or 110,000 miles

Information Gateway project will address this situation. It will allow users to find the records of regulated entities near a location specified on a map, display and correct location data, or provide location data for new entities.

Personal Computer Life-Cycle Replacements

The agency maintains a life-cycle replacement program for personal computer workstations. Funding for this program was interrupted for the 2012–13 biennium, increasing the number of workstations older than called for in the replacement plan. Workstations that are too old cannot support the agency’s software configuration, and incur repair costs and work interruptions when they fail. Partial funding was restored in the current biennium, and the agency will continue the life-cycle replacement program in subsequent biennia.

Data Network and Security

The TCEQ maintains a life-cycle replacement program for network equipment and software, including network security appliances. As equipment is replaced, we gradually add new capabilities so that we can take advantage of new offerings from the statewide telecommunications network and prepare for future applications.

For example, many of our statewide trunk circuits have moved to Multiprotocol Label Switching (MPLS) technology, improving network efficiency and enabling a number of important new capabilities. The MPLS network can handle different types of traffic using a single network infrastructure, recover automatically from some types of network failures, tailor quality of service to different types of traffic according to their requirements, and connect remote sites directly to the consolidated data centers without having to route through the Austin headquarters.

Historically Underutilized Business (HUB) Program

Mission Statement

The Historically Underutilized Business (HUB) program of the TCEQ encourages the use of HUBs

in procurements and contracts for commodities and services by promoting full and equal business opportunities for all businesses in Texas.

Policy

The TCEQ has adopted Title 34, Texas Administrative Code, Subchapter 20B (34 TAC 20B). Additional guidance is provided in the TCEQ’s Operating Policies and Procedures and Guide to Administrative Procedures (GAP) Manual.

Definition

A HUB is defined by the Texas Government Code, Chapter 2161, and 34 TAC 20.10–12 as a business formed for the purpose of making a profit, provided the following criteria are met:

- The principal place of the business must be in Texas.
- The proprietor of the business must be a resident of the State of Texas.
- At least 51 percent of the assets and at least 51 percent of all classes of the shares of stock or other equitable securities in the business must be owned by one or more persons whose business enterprises have been historically underutilized (economically disadvantaged), because of their identification as members of at least one of the following groups: African American, Hispanic American, Asian Pacific American, Native American, American women, and service-disabled veterans.
- The individuals mentioned above must demonstrate active participation in the control, operation, and management of the business.
- The business must be involved directly in the manufacture or distribution of the contracted supplies or materials, or otherwise warehouse and ship the supplies or materials.
- The business must be classified as a small business consistent with the U.S. Small Business Administration’s size standards and based on the North American Industry Classification System code.

Program Staff

The TCEQ has two FTEs—a coordinator and an assistant coordinator—focused solely on the HUB program. The HUB coordinator communicates directly with the executive director, serves as a resource to other TCEQ management and program staff, and reports and responds to oversight entities as required. HUB staff are involved in standard HUB-related activities, ranging from vendor outreach to staff education on program requirements. In addition to HUB program staff, other TCEQ staff involved in procurement and contracting are required to implement state and agency HUB-related rules, as identified in operating policies and procedures posted agency-wide.

Program Performance, Goals, Objectives, and Strategies

Table 6 reflects 2012 and 2013 HUB program performance. Following the table are the operational goals, objectives, and strategies that the TCEQ employs in working to meet its HUB-related mission.

Outreach to Vendors

Goal 1. Increase the utilization of HUB-certified vendors through external outreach.

Objective 1.1. Encourage HUB participation through external outreach.

Strategy 1.1.A. Advise vendors, business associations, and others of the agency’s procurement processes and opportunities.

Strategy 1.1.B. Assist service-disabled-veteran-, minority-, and women-owned businesses in acquiring HUB certification.

Strategy 1.1.C. Evaluate the structure of procurements to determine whether additional HUB opportunities could be furthered by, for example, initiatives such as segmenting large procurements or offering alternative bonding or insurance criteria.

Strategy 1.1.D. Facilitate mentor-protégé agreements to foster long-term relationships between contractors and HUBs.

Strategy 1.1.E. Conduct outreach activities that foster and improve relationships among HUB vendors, prime contractors, and purchasers.

Outreach to Purchasers and Key Decision Makers

Goal 2. Increase the utilization of HUB-certified vendors through internal outreach and procurement practices and policies.

Objective 2.1. Encourage directors, purchasers, project managers, and other personnel responsible for procurement of goods and services to maximize use of HUBs.

Strategy 2.1.A. Educate agency staff on HUB statutes and rules through online avenues, teleconferencing, and classroom training.

Strategy 2.1.B. Review existing policies and procedures and amend as necessary to encourage HUB utilization.

Strategy 2.1.C. Report HUB utilization data throughout the fiscal year so that each office can keep abreast of its ongoing performance.

Table 6. Agency-Specific HUB Goals and TCEQ Performance

Category	Goals for FYs 2012–2013	Performance		Goals for FYs 2014–2019
		2012	2013	
Commodity Contracts	21.0%	34.2%	27.8%	21.0%
Other Services Contracts	24.6%	37.0%	35.1%	24.6%
Professional Services Contracts	23.6%	22.9%	23.5%	23.6%
Special Trades*	32.7%	17.9%	16.5%	32.7%

* The TCEQ has limited decision-making ability in the special trades. Procurement decisions in this category are primarily vested in the leaseholders. All TCEQ facilities are either leased from a private entity or the Texas Facilities Commission.

Financial Status and Outlook

The TCEQ is presented with a unique set of challenges because of its complex funding system, which primarily consists of fee revenue that is appropriated by the Legislature to the agency to support agency operations.

Funding Sources and Uses

The TCEQ is funded primarily by fee revenues. The agency was appropriated \$728.9 million for the 2014–15 biennium, of which \$620.7 million (85.1%) was derived from dedicated fee revenues. The remainder of the agency’s appropriations consists of \$78 million in federal funds, \$18.1 million from General Revenue, and \$12.1 million in interagency contracts and appropriated receipts.

The appropriations from dedicated fee revenues for the 2014–15 biennium consist of \$155.3 million (21.3%) from the Texas Emissions Reduction Plan fund, \$109.9 million (15.1%) from the Water Resources Management Account, \$109.2 million (15%) from the Clean Air Account, \$63.1 million (8.7%) from the Operating Permit Account, \$56.9 million (7.8%) from the Waste Management Account, \$50.4 million (6.9%) from the Hazardous and Solid Waste Remediation Account, \$44.2 million (6.1%) from the Petroleum Storage Tank Remediation Account, and the remaining \$31.7 million (4.3%) from other dedicated fee funds.

While the TCEQ is primarily a fee-funded agency, many of the fees and funds have use restrictions that limit the ability of the TCEQ and the Legislature to allocate funds to meet challenging environmental needs. However, some flexibility is provided by Rider 13 in the TCEQ’s General Appropriations Act, which allows for the reallocation of 7 percent of funds for other uses.

Funding Issues

In the next few years, the TCEQ will face a number of unique financial challenges in funding several of its key environmental programs.

The Low-Level Radioactive Waste Disposal Account (088) provides funding to oversee the low-level radioactive waste disposal facility operations located in Andrews County. During the 83rd Legislative Session, SB 347 was passed with the intent of creating a new Environmental Radiation and Perpetual Care Account. Due to an oversight, the new account was not included in the funds-consolidation bill and therefore the new account was not created. Until this has been corrected, the revenue that was intended to be redirected to this new account as well as revenue that was intended to be deposited to account 088 will be deposited to Unappropriated General Revenue. Revenue for this account has also been affected by HB 7, 83rd Legislative Session, which redirected interest revenue to Unappropriated General Revenue.

The Clean Air Account (0151) balance is anticipated to grow from \$126 million at the end of 2013 to over \$200 million by the end of 2015. This is the result of reduced appropriations for the LIRAP program by the 82nd Legislature.

The Water Resource Management Account (0153) is facing a significant funding need in the coming years to manage the ongoing drought in Texas along with other water-related programs. The drought will continue to require additional spending by the TCEQ on water programs throughout the state and will require the TCEQ to increase revenue to ensure that cash is available to support the appropriations.

During the 83rd Legislative Session, SB 567 transferred the functions relating to the economic regulations (rates) of water and sewer services from the agency to the Public Utility Commission of Texas (PUC) and the Texas Office of Public Utility Counsel (OPUC). The costs of managing this program were appropriated out of the Water Resource Management Account (0153). If the PUC or OPUC request additional appropriations out of this account in future years, this will further erode the fund balance.

The Texas Emissions Reduction Plan (TERP) Program (Account 5071), the agency’s largest revenue generator, is expected to exceed the comptroller’s Biennial Revenue Estimate (BRE) in fiscal years 2014

and 2015. The account's fund balance is growing and is projected to exceed \$897 million by the end of fiscal 2015. The growth of the fund balance is a result of both the economic recovery and a reduction in appropriations by the 82nd Legislature.

The agency has several sources of revenue that are directly affected by economic conditions. The Waste Management Account (0549) and the Hazardous Waste Remediation Account (0550) have been utilizing fund balance to cover appropriations for the past few years. Fees, such as the tipping fee, which are heavily affected by waste-generating activities such as home construction, have not been collected at the level projected. The accounts have sufficient fund balance to maintain appropriations for a few years, but if the reduction in revenue collections continues, the agency will need to address shortages with a fee-rate adjustment.

HB 7, 83rd Legislative Session, made a significant change to the collection of the tipping fee and the allocation of revenue between the Waste Management Account (0549) and the Solid Waste Disposal Account (5000). The bill reduced the total amount of the tipping fee revenue collected by the agency by 25 percent and changed the revenue split between the Waste Management Account and the Solid Waste Disposal Account from a 50/50 percent allocation to a 67/33 percent allocation. This resulted in no significant change to the amount of revenue deposited to Account 0549, but does result in a reduction in revenue for Account 5000. However, due to reduced appropriations, the fund balance for Account 5000 will not be negatively affected. This will continue until appropriations increase.

The agency has some accounts that are performing above expectations. The Used Oil Recycling Account (0146), the Occupational Licensing Account (0468), and the Environmental Testing Lab Accreditation Account (5065) are bringing in revenues above BRE estimates and appropriated totals. This has helped build fund balances in these accounts. Revenue collected in the Watermaster Administration Account (0158) has consistently been above the BRE, which

has allowed the program to request additional appropriation authority during the past few years.

The TCEQ continues to work to achieve its major goals, such as the reduction of air emissions and waste generation, despite the reduced appropriations from the 2012–13 biennium. The agency is in the process of reviewing appropriation levels in order to ensure it sustains its ongoing operations.



Economic and Population Forecast

Table 7 represents the population and economic forecast for Texas through fiscal 2019.

Table 7. Economic and Population Forecast for Texas and the U.S., FYs 2012–2019, Winter 2013 Forecast

CATEGORY	2012	2013	2014*	2015*	2016*	2017*	2018*	2019*
TEXAS								
Gross State Product (2005 dollars, billions)	\$1,198.5	\$1,248.2	\$1,294.4	\$1,338.5	\$1,385.9	\$1,436.8	\$1,493.7	\$1,552.7
Annual Change (%)	4.7	4.1	3.7	3.4	3.5	3.7	4.0	4.0
Texas Exports (billions)	\$263	\$271	\$284	\$300	\$323	\$348	\$373	\$401
Taxable Oil Price (\$ per barrel)	\$92	\$93	\$94	\$87	\$84	\$91	\$94	\$97
Taxable Natural Gas Price (\$ per MCF ¹)	\$3.8	\$3.4	\$3.3	\$3.4	\$3.8	\$3.9	\$4.0	\$4.1
Personal Income (current dollars, billions)	\$1,064.5	\$1,116.7	\$1,161.1	\$1,210.4	\$1,278.1	\$1,352.8	\$1,431.6	\$1,513.5
Annual Change (%)	4.6	4.9	4.0	4.2	5.6	5.8	5.8	5.7
Nonfarm Employment (thousands)	10,793	11,109	11,349	11,589	11,842	12,116	12,375	12,619
Annual Change (%)	2.6	2.9	2.2	2.1	2.2	2.3	2.1	2.0
Resident Population (thousands)	26,006	26,442	26,887	27,338	27,795	28,254	28,715	29,179
Annual Change (%)	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.6
Unemployment Rate (%)	7.1	6.5	6.4	6.3	5.9	5.5	5.3	5.1
UNITED STATES								
Gross Domestic Product (2005 dollars, billions)	\$15,396	\$15,639	\$16,002	\$16,515	\$17,042	\$17,564	\$18,084	\$18,605
Annual Change (%)	2.8	1.6	2.3	3.2	3.2	3.1	3.0	2.9
Consumer Price Index (1982–84 = 100)	229	232	236	239	244	249	253	258
Annual Change (%)	2.7	1.3	1.7	1.3	2.1	2.0	1.6	2.0
Prime Interest Rate (%)	3.3	3.3	3.3	3.3	4.6	6.6	7.0	7.0

*Projected. ¹MCF = 1,000 cubic feet (cf). Sources: Texas Comptroller of Public Accounts; Texas State Data Center.

Technological Developments

Information Strategic Plan

From its inception, the TCEQ has recognized that information systems are vital to its ability to accomplish its mission. The most recent version of the TCEQ Information Strategic Plan was completed in early 2010 and identified the following major IT goals for fiscal years 2012 to 2017. A series of strategies, projects, programs, and internal initiatives were also identified to achieve each of these respective goals.

- *Improve Internal and External Access to Information.* The TCEQ is planning to expand its Web-integrated

enterprise information gateway with geospatial functionality, initiate an online electronic records system (eRecords), and continue adding to its capability to process online transactions.

- *Enable Strategic Management of Information.* Adoption of IT best practices and security standards is driving more consistent, efficient, and secure data and technology management throughout the agency. We continue to support the adoption of a more customer-focused architecture and improved code reuse.
- *Support a High-Performing Next-Generation Workforce.* Our computational capabilities allow the

agency workforce to use their knowledge, skills, and abilities to achieve the agency’s mission. Through automation, we focus our IT resources toward maximizing workforce efficiency.

Interacting with the Public through the Web

The key goals for the public website are to increase public access to agency information and to increase online transactions between us and the public, including the regulated community. Toward that end, we have made several types of regulatory documents available on the public website, including all background documents supporting items on the commission’s agenda, all permits and enforcement orders issued by the commission since 1995, and most types of permits that are issued by the executive director.

At <www.tceq.texas.gov/about/comments.html>, visitors can submit comments electronically, both on proposed rules and on pending permit applications. We have added online viewing of comment letters, hearing requests, and public-meeting requests on contested permit applications. We also added more access points to the customer satisfaction survey, and introduced a calendar where the public can find and view upcoming events from a central portal.

The TCEQ recognizes the need for abundant and timely communication with all interested parties. The TCEQ has developed a Web page specific to potential air issues around the Barnett Shale area. Actions and issues concerning the Barnett Shale area can be found on the TCEQ’s Barnett Shale Web page, at <www.tceq.texas.gov/goto/barnettshale>. The agency also developed an interactive map to show the location of sampling conducted in the 24-county Barnett Shale area. Once a sampling location is selected, any available sampling data or health-effects evaluations are provided to the requestor. The success of this effort has resulted in the plan to develop an enterprise geospatial gateway, which will provide a map-based interface with key data about regulated entities, for use by both TCEQ staff and TCEQ customers.

We offer online permit application and approval for stormwater permits and petroleum storage tank

registrations, concentrated animal feeding operations, water quality industrial stormwater multi-sector general permits, pesticides general permits, and air permits by rule (PBRs). We have implemented online registration of boat-sewage facilities. We have improved the process to submit a public-information request to the agency. And we will continue adding new types of transactions to our online capabilities.

To further increase functionality and facilitate navigation around the more than 12,000 Web pages and 75,000 documents maintained on the TCEQ website, the agency updated its website. Unveiled in 2013, the updated site uses responsive design to allow viewing on desktop, tablet, or mobile devices. We also established a more customer-focused process for Web content development. We now:

- Train all employees who contribute content to the public website to write in plain language.
- Target key areas of the site on an ongoing basis to improve the user experience through usability assessment and testing.
- Have the ability to introduce folder-based templates and local navigation through our Web content management system. Over time, we plan to improve the user experience as we modify folders for subjects such as air, land, or water to have specific navigation elements and a unique look and feel without altering content created by subject-matter experts.
- Make all aspects of our websites accessible to people with disabilities, who make up fifteen percent of the population. Many of these changes are also contributing to general user comprehension of our Web content.

To expand communications through social media, in fiscal 2012, we launched our YouTube channel, and then in fiscal 2013, we launched an agency Twitter account, both called TCEQNews. During this time, we also launched Facebook and Twitter sites for our public-outreach program, Take Care of Texas, and redesigned the TCOT website.

And with the popularity of text messaging, we further expanded our online resources by offering

automatic alerts to anyone wanting immediate updates on many of our programs. Subscribers can receive notifications by either e-mail or text message for more than 160 topics, at no charge. We plan to continue exploring increased use of social media, texting, and other emerging tools to meet the information needs of the public.

Impact of Anticipated Technological Advances

We expect that technological advances will continue to provide new opportunities to improve service and our protection of the environment, but they will present challenges stemming from vast increases in the quantity of data that will be available and the greater ease with which our systems may be reached from outside.

- Sources of environmental data will improve in resolution and coverage.
- Public networks will increase in capability, and both individuals and organizations will become more sophisticated in their use.
- Mobile computing and communication devices will become more capable and more widely used.
- More citizens will be using Web-based social media, and more public dialog will be taking place in those contexts.
- Technical and legal systems for securing online transmissions will improve.

Taken together, these developments will mean that:

- We will have much more data available, and more powerful tools with which to analyze it and present the results. We will be able to improve our environmental decisions.
- We will be able to provide better service to the regulated community and the public, making interactions with our programs cheaper and quicker.
- We will need to continually adapt our information-exchange practices to new environments, providing and accepting information in new ways.

- Our data-storage costs will increase. Data storage constitutes a significant portion of our cost at the state's data centers, and we will have to manage it carefully.
- Our systems will be exposed to more attacks using increasingly sophisticated techniques. We will have to design hardware, software, and network configurations with security in mind.

Degree of Agency Automation, Telecommunications, etc.

Essentially all agency environmental and regulatory programs are highly dependent on data systems.

- Regulatory programs require records identifying members of the regulated community, and recording their interactions with the agency.
- Environmental analyses require data on ambient conditions across the state, and the power to model and predict the outcomes of economic activity and regulatory programs.
- Most agency staff require access to data communications and information storage and retrieval, whether they directly execute agency regulatory or environmental functions, or perform support functions.
- Most agency funding, apart from federal pass-through grants, is fee-based. Agency computer systems account for the fees owed and paid.

Anticipated Need for Automation (either Purchased or Leased)

Agency information needs are being influenced heavily by pressures on how the agency conducts business. We are facing pressures such as:

- The increased participation by external parties in agency policy development and decision making, and the need to be accountable to those parties for agency activities and decisions.
- The need to recognize the business environment by using more regulatory flexibility.
- The need to provide better customer service to the regulated community and the public while providing secure access to information.

- Budget and resource constraints in an era of growing agency responsibilities (growth in population, industry, and regulatory demands).
- Expectations that agency actions and decisions will be taken based on an understanding of risk to the environment and to public health.

These pressures create ever greater demands on us to better manage and analyze information to support increasingly challenging decisions. Now, more than ever, we need information systems that:

- Provide a view of regulated entities from a multimedia perspective so that we can improve our understanding and regulation of the regulated community, and improve our interactions with regulated entities.
- Enhance our understanding of environmental conditions and how we can affect them.
- Track how agency resources are being allocated and expended and help us plan ahead for future expenditures.

- Enhance our understanding of the relationship between agency activities and compliance behavior, pollution prevented, and environmental improvements.

We will continue to maintain information systems that:

- Integrate key facility information across regulatory program areas.
- Integrate key agency activity information across agency functions such as compliance and permitting.
- Enable place-based analysis.
- Enhance understanding of environmental conditions.
- Provide staff with timely and ready access to the information needed to do their jobs successfully.
- Enhance the management of agency commitments and associated resource allocation.
- Provide both TCEQ staff and external parties an understanding of agency activities and results.

Impact of Federal, State, and Legal Actions

Federal Authority

The TCEQ has been authorized to fulfill the responsibility for executing most major federal environmental programs in Texas, as indicated in Table 8, below. A state is eligible for federal program authorization if it successfully enacts and executes environmental laws and regulations that are at least as strict as their federal counterparts, ensuring the protection of the state’s natural resources.

In 1997, the TCEQ and the EPA adopted a Performance Partnership Agreement. Texas was one of the first state environmental agencies in the nation to enter into such an agreement with the EPA, which provides opportunities to adjust planning and funding priorities between major delegated federal programs according to the unique needs of the state.

Recent changes to federal regulations continue to have an effect on the TCEQ, its workload, and its responsibilities.

Table 8. Major Federal Statutes for Which All or Partial Responsibility Is Authorized to the TCEQ

<p>33 United States Code, Section 1251 et seq. Water Pollution Control Act (Clean Water Act)</p>	<p>The federal Water Pollution Control Act (also referred to as the Clean Water Act) has the congressional objective of restoring and maintaining the chemical, physical, and biological integrity of the water of the United States. The act creates the organizational framework for Texas’ delegated National Pollution Discharge Elimination System program. Section 1321 of the act applies to discharges of oil or hazardous substances into or upon U.S. navigable waters and adjoining shorelines, or discharges that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States.</p>
<p>33 United States Code, Section 2701 et seq. Oil Pollution Act of 1990</p>	<p>The Oil Pollution Act provides for the federal and state Natural Resource Trustees to collect natural resource damages from responsible parties when there has been injury to, destruction of, or loss of natural resources as a result of a discharge of oil. These provisions also set forth the federal oil spill fund, which allows the federal and state Natural Resource Trustees to seek reimbursement from the fund for damages to natural resources. The TCEQ is one of three state Natural Resource Trustees.</p>
<p>42 United States Code, Section 300f et seq. Safe Drinking Water Act</p>	<p>The Safe Drinking Water Act gives Texas authority to regulate its public water systems and ensure that the EPA’s safe drinking water requirements are met in Texas. Additionally, sections 300h through 300h-8 apply to underground injection wells and allow a state to implement an underground injection control program that meets the minimum federal requirements.</p>
<p>42 United States Code, Section 2011 et seq. Atomic Energy Act of 1954</p>	<p>The Atomic Energy Act of 1954 authorizes the regulation of the uses of nuclear materials and facilities. The act requires the Nuclear Regulatory Commission to establish standards for the possession, use, handling, and disposal of nuclear materials and allows the NRC to enter into an agreement with a state to cede authority to the state to implement certain regulatory programs under the act, as long as the state maintains a regulatory program compatible with the NRC’s requirements. Texas is an agreement state.</p>

continued on next page

Table 8. Major Federal Statutes for Which All or Partial Responsibility Is Authorized to the TCEQ (continued)

<p>42 United States Code, Section 2021b et seq. Low-Level Radioactive Waste Policy Act and Low-Level Radioactive Waste Policy Amendment Act</p>	<p>The Low-Level Radioactive Waste Policy Act and its subsequent amendment give the states responsibility for the disposal of low-level radioactive waste within their boundaries and authorizes them to enter into interstate compacts to create regional disposal facilities.</p>
<p>42 United States Code, Section 6901 et seq. Solid Waste Disposal Act (Resource Conservation and Recovery Act)</p>	<p>The Resource Conservation and Recovery Act (RCRA) governs the management and disposal of solid wastes. Under the RCRA, the EPA has established federal standards for the generation, transportation, treatment, storage, and disposal of municipal solid wastes (Subtitle D) and hazardous solid wastes (Subtitle C). The TCEQ is authorized to administer these two programs in Texas. In addition, Texas is approved to administer the underground storage tank (UST) program, under RCRA, Subtitle I, which regulates underground storage tanks containing hazardous substances and petroleum products.</p>
<p>42 United State Code, Section 7401 et seq. Air Pollution Prevention and Control Act (Clean Air Act)</p>	<p>The Clean Air Act establishes the federal program for air-pollution prevention and control. It provides for air quality standards and emissions limitations (e.g., air quality control regions, national ambient air quality standards [NAAQS], state implementation plans [SIPs], new-source performance standards, and emission standards for hazardous air pollutants); establishes programs for the prevention of significant deterioration and for nonattainment permits, emissions standards for moving vehicles (including engine and fuel standards), and acid deposition control; and establishes a federal operating permit program (Title V) and other programs not administered by the states (Title VI, Stratospheric Ozone Protection). The TCEQ administers the air permitting programs in Texas, i.e. Title V and New Source Review permits. The EPA has been the permitting authority under the federal Clean Air Act and a federal implementation plan for greenhouse gases. HB 788, 83rd Legislature, requires the TCEQ to promulgate rules for the TCEQ to be the permitting authority in Texas for GHGs and to have the FIP rescinded.</p>
<p>42 United States Code, Section 9601 et seq. Comprehensive Environmental Response, Compensation, and Liability Act</p>	<p>The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides broad federal authority and requirements for coordination with the states for responding directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Additionally, CERCLA establishes prohibitions and requirements concerning closed and abandoned hazardous waste sites, provides for the liability of persons responsible for releases of hazardous waste at these sites, establishes a fund for cleanup when no responsible party can be identified, and provides for the restoration of natural resources.</p>

Anticipated Changes in Federal Authority

Federal initiatives to address the following issues have, or are expected to, affect the TCEQ's programs.

Air Quality

Cross-State Air Pollution Rule (CSAPR)

On July 6, 2011, the administrator of the U.S. Environmental Protection Agency (EPA) signed the Cross-State Air Pollution Rule (CSAPR), which imposed federal implementation plans (FIPs) on Texas and 26 other states to address transport requirements under the federal Clean Air Act 110(a)(2)(D)(i) for the 1997 eight-hour ozone NAAQS (National Ambient Air Quality Standards) and the 1997 and 2006 fine particulate matter (PM_{2.5}) NAAQS. The CSAPR was a replacement rule for the federal Clean Air Interstate Rule (CAIR) that was vacated in 2008 by the U.S. Court of Appeals. The court reinstated CAIR in December 2008 until the EPA implemented a replacement rule. The CSAPR requires power plants within the affected states to comply with ozone season nitrogen oxides (NO_x) emission budgets for states included under the rule for the 1997 eight-hour ozone NAAQS and with annual sulfur dioxide (SO₂) and NO_x emission budgets for states included under the rule for the 1997 and 2006 PM_{2.5} NAAQS.

While Texas was only proposed to be included under the CSAPR for the 1997 eight-hour ozone NAAQS with ozone season NO_x emission budget requirements, the EPA finalized the rule with Texas also subject to the particulate matter programs. The EPA assigned Texas annual budgets for NO_x and SO₂ without providing the TCEQ and affected power plants within the state the opportunity to comment on them. The final rule would have required a 47 percent reduction from Texas power plant 2010 SO₂ emissions by 2012.

Since the final rule was signed on July 6, 2011, the EPA has proposed and finalized several revisions to the CSAPR that increased the total states subject to the rule to 28 and made technical adjustments to the CSAPR state emission budgets based on updated information on emission controls already installed at certain power

plants. The EPA finalized the budget-revision proposals through two final rules issued on Feb. 7, 2012. The final rule now sets Texas' annual SO₂ budget at 294,471 tons (an increase of 50,517 tons from the budget set in July 2011). Even with these slightly larger emission budgets, this would still require reductions in annual SO₂ emissions by 36 percent from 2010 levels.

The attorney general for the State of Texas filed with the U.S. Court of Appeals for the District of Columbia Circuit a petition for review on Sept. 20, 2011, and a motion for stay of the final rule on Sept. 22, 2011. The rule is also being challenged by Texas electric-generating utilities, including Luminant and San Miguel, and multiple other parties. Thirteen other states also filed administrative and legal challenges to the rule. The CSAPR PM_{2.5} program for annual NO_x and SO₂ was scheduled to begin on Jan. 1, 2012, and the ozone season NO_x program on May 1, 2012. On Dec. 30, 2011, the U.S. Court of Appeals granted the State of Texas' request to stay the CSAPR.

On Aug. 21, 2012, the D.C. Circuit vacated the CSAPR in full in a 2-1 decision, and ordered the EPA to continue administering CAIR until the EPA can come up with a replacement rule. The court determined that the CSAPR violated the plain language of Section 110(a)(2)(D)(i) of the CAA in two ways. First, the EPA may not require states to reduce more than the amount of emissions that they contribute to nonattainment or maintenance in a downwind state, and second, the EPA must first set a standard and then give states a reasonable opportunity to develop and submit a SIP before the EPA can issue a FIP. The dissent reasoned that these issues had not been properly preserved, and therefore were not properly before the court. On June 24, 2013, the U.S. Supreme Court granted certiorari; oral arguments were heard by the supreme court on Dec. 10, 2013, and no decision has been released yet.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

On Dec. 16, 2011, the EPA administrator signed the final National Emission Standards for Hazardous Air

Pollutants (NESHAP) rule for electric utility steam generating units (EGU) that generate electricity for sale. The final utility NESHAP rule, also called Mercury and Air Toxics Standards (MATS) by the EPA, is adopted in Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart UUUUU. The final rule was published in the Feb. 16, 2012, *Federal Register* and became effective April 16, 2012. The new MATS rule establishes maximum achievable control technology (MACT) standards for existing, reconstructed, and new EGUs rated greater than 25 megawatts that are fired on coal, liquid oil, or solid oil-derived (i.e., petroleum coke) fuels as well as for existing and new integrated gasification combined cycle (IGCC) EGUs.

For coal-fired and petroleum coke-fired EGUs, which are the predominant EGUs in Texas affected by it, the MATS rule established MACT emission standards for mercury, acid gases, and non-mercury metal HAPs (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium). The primary standard for acid gases is a hydrogen chloride emission standard, but an alternate SO₂ surrogate standard is allowed for units equipped with flue gas desulfurization. For non-mercury metal HAPs, affected units must meet either a filterable particulate matter surrogate standard, a total non-mercury metal HAP standard, or the speciated non-mercury metal HAP standards.

The rule also prescribes work practices for startup and shutdown operations as well as periodic boiler tune-ups. Units that began construction or reconstruction by May 3, 2011, are classified as existing units. Units that began construction or reconstruction after May 3, 2011, are classified as new units and subject to the new-unit emission standards, which are in most cases significantly more stringent than the existing-unit emission standards. Existing units must comply with the rule within three years of the effective date of the final rule, i.e., April 16, 2015; however, a state permitting authority may grant a one-time, one-year extension. New units must comply with the rule upon startup.

The TCEQ is required to take delegation of major source NESHAP rules such as the MATS rule, and will be tasked with enforcing most aspects of the rule. Certain aspects of the MATS rule, such as the affirmative defense provisions, will directly affect TCEQ programs once the state receives delegation for the rule. Concurrent with the MATS rule, the EPA also finalized revisions to New Source Performance Standards (NSPS) rules for fossil fuel-fired steam generators in 40 CFR, Part 60, Subparts D, Da, Db, and Dc. The revisions to 40 CFR, Part 60, Subpart Da, also included an affirmative defense provision, which the TCEQ will be required to enforce. On April 13, 2012, the attorney general for the State of Texas, on behalf of the TCEQ and the Public Utility Commission of Texas, filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit and a petition for reconsideration with the EPA challenging the MATS rule as well as the revisions to the NSPS rule.

The D.C. Circuit Court has severed several issues from the primary MATS case. The severed issues involve specific issues regarding the new unit standards, and the startup and shutdown requirements for MATS and the NSPS, as well as other specific, limited issues. The EPA granted reconsideration for the new unit standards and the startup and shutdown requirements for MATS and the NSPS.

On April 1, 2013, the EPA released the final version of the reconsidered rule for the new unit standards. Certain specific issues with the final reconsideration were also challenged in the D.C. Circuit, and those cases are ongoing. The cases involving the severed issues are still proceeding. For the primary MATS case, final briefs were filed on July 26, 2013, and oral arguments were heard in the primary MATS cases on Dec. 10, 2013. No decision has been issued by the D.C. Circuit.

Known Review Schedules for Specific NAAQS

Sections 108 and 109 of the federal Clean Air Act (CAA) govern the establishment, review, and revision, as appropriate, of the NAAQS to provide protection for the nation's public health. The review includes several phases, including Planning, Integrated Science

Assessment, Risk/Exposure Assessment, Policy Assessment, and Rulemaking. The CAA requires the EPA to review and, if appropriate, revise the NAAQS every five years. The following describes the current understanding of the schedules for review or anticipated changes to some of the NAAQS.

Ozone

Under the current review schedule, the EPA should have proposed any appropriate revisions in October 2013 and finalized any revisions to the standard in July 2014. However, current information from the EPA does not have an anticipated proposal or adoption date. As of February 2014, the EPA is currently in the process of its health-risk and exposure assessment for ozone.

Lead

The Lead NAAQS was revised in 2008 with final designations in 2012 and attainment demonstrations due to the EPA and attainment dates no later than January 2017. The next review-cycle schedule would have the EPA propose and finalize any appropriate revisions to the standard in 2014.

Particulate Matter Standard (PM₁₀ and PM_{2.5})

The final rule for PM NAAQS was announced by the EPA on Dec. 14, 2012. For particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}), the EPA strengthened the annual primary PM_{2.5} standard to 12 µg/m³ and retained the current 24-hour primary PM_{2.5} standard of 35 µg/m³ using a three-year annual average. The EPA retained the current standard for particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀). Existing secondary standards for both PM_{2.5} and PM₁₀ were also retained. No counties in Texas are currently designated nonattainment or in maintenance status for the primary annual PM_{2.5} standard.

Secondary Standards for Nitrogen

Dioxide (NO₂) and Sulfur Dioxide (SO₂)

The EPA sets secondary (welfare-based) standards to protect against environmental damage caused by

certain air pollutants. On April 3, 2012, the EPA published the final rule, which retained the current secondary NAAQS for NO₂ and SO₂. The existing NO₂ secondary standard is 53 ppb annual arithmetic average, calculated as the arithmetic mean of the one-hour NO₂ concentrations. The existing SO₂ secondary standard is a three-hour average of 0.5 ppm, not to be exceeded more than once per year. The EPA is developing a pilot program to address multi-pollutant deposition-related acidification of sensitive aquatic ecosystems.

Water Availability

Return Flows to Reservoirs

The TCEQ is monitoring federal activities that may affect water rights in Texas, including rulemaking or federal legislation that would allow the United States Army Corps of Engineers to adjust reservoir operations. The TCEQ's position is that states have absolute jurisdiction over water rights.

Water Quality

Waters of the United States

The federal Clean Water Act (CWA) establishes the federal legal framework for protection of water quality in the United States. The scope or jurisdiction under the federal statute is generally tied to "waters of the United States." The U.S. Supreme Court decisions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* in 2001 and *United States v. Rapanos* in 2006 has led to a wide range of legal opinions as to the definition of "waters of the United States" and therefore the scope of the CWA.

Initially, the EPA and the U.S. Army Corps of Engineers (Corps) attempted to clarify CWA jurisdiction by developing a guidance document. The EPA and the Corps received numerous comments on their attempt to expand jurisdiction through guidance, resulting in the EPA withdrawing the document. The EPA is now working on a rulemaking that would expand federal jurisdiction under the CWA. To support that rulemaking, the EPA is also working on a connectivity study.

Much of the controversy generated by these federal efforts concerns the scope of the CWA as it relates to intermittent or ephemeral streams and isolated wetlands. The guidance and draft rule both seek to expand the federal government’s jurisdiction under the CWA by capturing those types of water bodies. There is also much public criticism over the timing of the rule—the rule was completed and sent to the federal Office of Management and Budget before the EPA completed the connectivity study that is supposed to inform the rule.

Expansion of EPA Stormwater Regulations

Discharges of stormwater from certain municipal separate storm sewer systems (MS4) are subject to federal regulations. The applicability of federal regulations is tied to whether the MS4 is located in an urbanized area, as identified by the federal census. Urbanized areas expanded with the 2010 census; as a result, the scope of this federal program also expanded. When originally implemented in 2007, the TCEQ’s MS4 program regulated approximately 400 entities. Today, approximately 800 entities are subject to the requirements of this federal program.

In addition, the EPA has initiated rule-development efforts to establish a program that would increase regulatory requirements for stormwater discharges from newly developed and redeveloped sites. The proposed rulemaking would also expand the areas subject to stormwater regulations and increase the regulatory requirements of state or local authorities. The TCEQ has regulatory authority over stormwater discharges in the state and would be required by the agency’s memorandum of understanding with the EPA to implement these new regulations, if adopted at the federal level. This regulatory action is being monitored and evaluated for the possible effects to the TCEQ and the regulated community in Texas.

Federal Rules Mandating Electronic Permitting and Reporting

The EPA has proposed rules that would require electronic permitting and reporting for certain Texas

Pollutant Discharge Elimination System (TPDES) permits. This rule would require all TPDES permitted entities to report data electronically. Further, the rule would require electronic permitting for all general-permit authorizations (such as those for municipal, industrial, or construction stormwater discharges). Any entity seeking a wastewater or stormwater general permit through the TCEQ would have to apply for, and secure, that permit through a Web-based application. In some very limited circumstances, entities would be able to file a waiver to these electronic requirements.

As proposed, this rule would require full implementation within two years—estimated to be mid-2017. The TCEQ will need to significantly expand and upgrade agency data systems and hardware to comply with these federal rules. Outreach activities and extensive customer support will be critical components of implementation.

Waste

Coal Combustion Residuals (CCRs)

Subsequent to an accident in Tennessee that resulted in releases of coal combustion residuals (CCRs), the EPA published a proposal in 2010 to regulate the management of CCRs. CCRs are considered non-hazardous industrial solid wastes by the EPA under the “Bevill Exclusion.” In line with this, CCRs are not considered as hazardous waste under Texas regulations and a permit is not required for on-site disposal of CCRs. The EPA’s proposal provided two options:

- Option I (Subtitle C option) proposed to regulate CCRs as a “special waste” when destined for disposal, and to subject CCR surface impoundments and landfills to some of the hazardous waste regulations under the Subtitle C regulations of the Resource Conservation and Recovery Act (RCRA).
- Option II (Subtitle D option) proposed to retain the current “Bevill Exclusion” and regulate CCR landfills and surface impoundments by establishing national criteria in accordance with the Subtitle D regulations of the RCRA.

The executive director provided comments on the EPA proposal and noted that existing commission requirements are effective and encourage CCR recycling. These comments pointed out that subjecting CCRs to the hazardous waste regulations would negatively affect their beneficial use and that regulating CCRs under the Subtitle D option is preferred, should the EPA determine that federal regulation is necessary and appropriate. The EPA has agreed to issue a final CCR rule by Dec. 19, 2014, as part of a proposed lawsuit settlement with CCR recyclers, environmental groups, and other stakeholders.

In a recent report (published in February 2014), the EPA has acknowledged the beneficial use of CCRs and concluded that CCR usage in an environmentally sound manner, can contribute significant environmental and economic benefits. Based on this conclusion, the EPA has stated that it supports the beneficial use of CCR fly ash in encapsulated form in concrete and in flue-gas-desulfurization gypsum wallboard, which account for almost half of the total amount of CCRs that are beneficially used.

The U.S. Congress has worked on providing statutory direction for the management of CCRs by introducing a number of bills. The most recent bill, HR 2218 (Coal Residuals Reuse and Management Act of 2013), passed the House on July 25, 2013, and now moves to the Senate for consideration. HR 2218 removes the option for the EPA to regulate CCRs under Subtitle C of the Solid Waste Disposal Act and allows states to develop CCR permit programs as long as they meet certain federal minimum requirements. HR 2218 also establishes minimum federal requirements for the management and disposal of CCRs, establishes a timeline for states to begin issuing permits once their permit programs are certified, and provides guidance for compliance with certain minimum standards during the intervening time.

The executive director does not have statutory authority under the Texas SWDA (Sec. 361.090) to permit the on-site disposal of nonhazardous industrial solid waste (i.e., discarded CCRs). If Texas chooses to implement a program as envisioned by

HR 2218, the Texas SWDA and commission rules would have to be amended.

Oversight of Radioactive Materials

The State of Texas and the U.S. Nuclear Regulatory Commission (NRC) have an agreement, first signed in 1963, that governs the regulation of radioactive material in Texas. This agreement makes Texas an “Agreement State,” with federally ceded authority and responsibility over many aspects of radioactive material, including radioactive waste management and disposal. As part of the Agreement State status, the TCEQ is subject to radioactive materials audits and federal program review through the IMPEP program by the NRC. Preparation for the next Texas audit will begin in 2013, with the on-site portion of the audit scheduled for early 2014.

Minor changes to current Texas rules will need to be addressed to reflect inconsistencies between NRC regulations and Texas regulations relating to the “Radiological Criteria for License Termination of Uranium Recovery Facilities,” in 10 CFR, Part 40. There is a rule revision in progress by the NRC that will affect Texas implementation of radioactive materials regulation. This rule revision is for low-level radioactive waste disposal, and includes changes to guidance and other federal position documents.

Additionally, there are NRC rule revisions that are either in progress or have been finalized requiring Texas to conduct rulemaking for compatibility. The first revision will affect licenses, certifications, and approvals for materials licenses to be compatible with 10 CFR 40. Additional TCEQ rulemaking will address changes in decommissioning planning for compatibility with 10 CFR 20 and 10 CFR 40. Lastly, TCEQ rulemaking will need to address technical corrections for compatibility with 10 CFR 40.

The 83rd Legislature

Budgetary Issues

The TCEQ will receive \$733.6 million for the 2014–15 biennium, which began Sept. 1, 2013.

This represents an increase of \$38.4 million from 2012–13 levels.

Several programs were affected:

- The Air Quality Planning grants were increased by \$1.5 million for the biennium and Granbury was added to the list of potential areas.
- The Texas Emissions Reduction Plan program received an increase of \$24.9 million and 5 FTEs for the biennium.
- The Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program received an increase of \$2.8 million for the biennium to allocate funds to Travis and Williamson counties.
- The Superfund Program has the authority to carry forward recovered costs between the biennia.
- The agency was appropriated \$785,362 for the biennium to implement a greenhouse gas emission permitting and regulatory program (HB 788). In addition, the program is authorized 1 FTE in fiscal 2014 and 10 FTEs in fiscal 2015.
- The agency will transfer its economic regulatory responsibilities over water and wastewater utilities to the Public Utility Commission (PUC), along with an estimated \$1.5 million budget and 20 FTEs for fiscal 2015. In addition, the agency will transfer State Office of Administrative Hearings (SOAH) costs to the PUC, estimated to be \$184,000 in fiscal 2015 (HB 1600).
- The agency was appropriated \$1.9 million for the biennium to implement the expedited air permitting program (SB 1756).

The agency's FTE cap, which reflects a reduction of 5 from the 2012–13 biennium, is 2,756.2.

Air Quality Issues

The importance of improving air quality and reducing emissions continues to be recognized by the Legislature through the passage of Senate Bill 1727, which made a number of changes to the Texas Emissions Reduction Plan (TERP)—most significantly, giving the

TCEQ the ability to establish and administer programs to fulfill the overarching goals of TERP. House Bill 788 requires the TCEQ to establish a permitting program for greenhouse-gas emissions. The program will allow the TCEQ to assume authority to issue greenhouse-gas permits that are currently being issued by the EPA.

Water Resource Issues

The unprecedented drought Texas has experienced has caused the TCEQ to face issues that it has never managed before. New water supplies and conservation will continue to be an important part of meeting the future water-resource needs of Texans. In an effort to assist water systems with drought or emergency shortages, HB 252 requires a retail public utility and each entity from which the utility is obtaining wholesale water service for the utility's retail system to notify the agency when the utility or entity is reasonably certain that a water supply will be available for less than 180 days. The TCEQ has a team in place to assist water systems nearing the 180-day mark.

HB 3233 was passed in an effort to facilitate the orderly and efficient processing of interbasin transfer applications by the TCEQ. The bill removes the requirement that an application for an interbasin transfer include the projected effect on user rates and fees for each class of ratepayer. Among other provisions, the bill also limits an evidentiary hearing on an application to transfer water authorized under an existing water right to the consideration of issues related to the applicable requirements for an interbasin transfer.

Water Utility Issues

A certificate of convenience and necessity (CCN) is a permit from the state that delineates a water or sewer utilities service area and requires the CCN holder to provide continuous and adequate service to anyone in their defined area that pays all the required fees and otherwise meets all the application requirements.

In accordance with HB 1600 and SB 567, the CCN program is being moved to the Public Utility Commission, effective Sept. 1, 2014. At the same

time, duties from the TCEQ’s Office of Public Interest Counsel (OPIC) will also be transferred to the Office of Public Utility Counsel (OPUC). The TCEQ will be required to transfer 20 FTEs to the PUC and one FTE to the OPUC.

The agency will also be required to adopt rules to reflect the transfer. HB 1600 and SB 567 require a

memorandum of understanding between the TCEQ and the PUC to be completed by Aug. 1, 2014.

Bills from the 83rd Legislature Affecting the TCEQ

The following is a partial list of bills passed during the 82nd Legislature that affect agency operations:

House Bills

HB 4 (Ritter)	Relating to the creation and funding of the state water implementation fund for Texas to assist the Texas Water Development Board in the funding of certain water-related projects.
HB 252 (Larson)	Relating to water-shortage reporting by water utilities and providers of wholesale water service.
HB 788 (W. Smith)	Relating to the regulation of greenhouse-gas emissions by the TCEQ.
HB 1600 (Cook)	Relating to the continuation and functions of the Public Utility Commission of Texas, to the transfer of certain functions from the TCEQ to the PUC, and to the functions of the Office of Public Utility Counsel; and authorizing a fee.
HB 2615 (Johnson)	Relating to reporting and information-availability requirements for persons impounding, diverting, or otherwise using state water.

Senate Bills

SB 347 (Seliger)	Relating to funding for the operations of the Texas Low-Level Radioactive Waste Disposal Compact Commission.
SB 567 (Watson)	Relating to rates for water service, to the transfer of functions relating to the economic regulation of water and sewer service from the TCEQ to the PUC, and to the duties of the Office of Public Utility Counsel regarding the economic regulation of water service.
SB 1727 (Deuell)	Relating to the use of the Texas Emissions Reduction Plan fund.
SB 1756 (Uresti)	Relating to the expedited processing of certain applications for permits under the Clean Air Act, and authorizing a surcharge.

Significant Court Cases

Decided Cases

Burlington Northern & Santa Fe Railway Co. v. United States et al.

129 S. Ct. 1870 (2009)

Case Summary: The U.S. Supreme Court held that under CERCLA, 42 USC 9601 *et seq.*, the EPA cannot hold parties liable as “arrangers” when those parties are selling an unused, useful product and did not intend to dispose of it at the contaminated site. The court additionally held that liable parties at a multiparty federal Superfund site can defeat the application of joint and several liability if there exists a “reasonable basis” to apportion liability.

Impact on the TCEQ: This decision affects TCEQ remediation functions because some parties potentially responsible for contamination at certain state Superfund sites have argued that this case relieves them of their liability to the state for cleanup of these sites, and on that basis have refused to fund or perform cleanups. In a recent case, *Celanese Corp. v. Eby Construction Co.*, 602 F.3d 529 (5th Cir. 2010), the court applied Burlington and held that Eby was not liable as an arranger under Texas law. In light of Burlington and Celanese, it is possible that fewer parties will conduct voluntary cleanups for contaminated sites, and the TCEQ will expend more state resources for both cleanups and the pursuit of cost recovery via litigation and administrative settlements. Additionally, the TCEQ shares costs (10%) with the EPA on many federal Superfund sites and this case would directly affect the agency’s ability to recover some of those costs under CERCLA.

While this case was not decided under the Texas Superfund law (THSC 361, subchapters F and I), the decision could affect TCEQ remediation functions because parties will analogize to this case even though CERCLA and the Texas Superfund law have significant differences in wording. Since the decision was issued, some parties potentially responsible for contamination at state Superfund sites have argued

that this case relieves them of their liability to the state for the cleanup of certain sites, and those parties have refused to fund or perform cleanups on that basis. It is possible that fewer parties will conduct voluntary cleanups for contaminated sites, and the TCEQ may have to expend more state resources for both cleanups and the pursuit of cost recovery via litigation and administrative settlements. Additionally, the TCEQ cost shares (10%) with the EPA on many federal Superfund sites and this case could affect the agency’s ability to recover some of those costs under CERCLA.

BCCA Appeal Group, Texas Association of Business, and Texas Oil and Gas Association v. U.S. Environmental Protection Agency

(Stephen L. Johnson as EPA Administrator, and Richard Greene as EPA Region VI Regional Administrator) Cause No. 3-08-cv-1491-G (U.S. Dist. Ct., N.D. Tex., filed Aug. 25, 2008)

Case Summary: The plaintiffs filed suit against the EPA regarding the EPA’s failure to perform its non-discretionary duty under the federal Clean Air Act to act (or, in some cases, fully act) on more than 30 air permitting rules adopted from approximately August 1993 to March 2007 by the TCEQ and its predecessor agencies. The issue is whether the EPA will approve these rules submitted by the TCEQ to the EPA as revisions to the State Implementation Plan (SIP), as required by the Clean Air Act. The majority of the rules are related to New Source Review (NSR) permitting. The case was settled with the parties agreeing to a schedule for EPA action on the rules by Dec. 31, 2013. On Oct. 19, 2009, the court entered an Order granting a Joint Motion to Stay Case, entering the previously lodged Consent Decree, which memorialized the settlement between the parties.

Impact on the TCEQ: For rules approved as SIP revisions by the EPA, there will be no impact on the TCEQ. Any rules that the EPA disapproves as a SIP revision will not be a part of the TCEQ’s approved permitting programs and will not be federally enforceable. Any disapproval will require the TCEQ to conduct additional rulemaking and make changes

in implementation of the NSR permitting program to conform with requirements of the Clean Air Act. In addition, certain disapprovals can lead to sanctions unless the TCEQ timely corrects the deficiencies, which affects the state by the loss of highway funding and grant money.

National Cotton Council of America v. U.S. Environmental Protection Agency

553 F.3d 927 (6th Cir. 2009); cert. denied, *CropLife America v. Baykeeper*, 130 S. Ct. 1505, 2010 WL 596546 (2010); cert. denied, *American Farm Bureau Federation v. Baykeeper*, 130 S. Ct. 1505, 2010 WL 596547 (2010)

Case Summary: On Nov. 27, 2006, the EPA issued a final rule on Aquatic Pesticides Rule, concluding that pesticides applied in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) are exempt from the permitting requirements under the Clean Water Act (CWA). The FIFRA program regulates the labeling and sale of pesticides. The rule clarified two specific circumstances in which a permit was not required to apply pesticides to or around water: (1) the application of pesticides directly to water to control pests, and (2) the application of pesticides to control pests that are present over or near water, where a portion of the pesticides will unavoidably be deposited to the water to target the pest. Environmental and industry groups filed petitions for review in every federal circuit, including the 5th.

The case was assigned to the 6th Circuit Court of Appeals. On Jan. 7, 2009, the court held that the final rule was not a reasonable interpretation of the CWA and vacated the rule. The EPA had argued that the residue from the application of pesticides was not discharged from a point source, meaning the residue cannot be subject to the permitting program because by the time it becomes a pollutant it is no longer from a point source. The court disagreed and said the pesticides originate from an applicator, which is a point source, and therefore a permit is required. The 6th Circuit held that CWA permits are required for all applications of biological and chemical pesticides that

leave a residue in water when such applications are made in or over, or near, U.S. waters. The EPA estimates that the ruling will affect approximately 365,000 applicators that perform 5.6 million pesticide applications annually.

On April 9, 2009, the EPA chose not to seek rehearing on the case. Instead, it filed a motion to stay issuance of the court’s mandate for two years to allow the EPA time to develop, propose, and issue a final National Pollutant Discharge Elimination System (NPDES) general permit for pesticide applications, for states to develop permits, and to reach out to and educate the regulated community. On Feb. 22, 2010, the U.S. Supreme Court denied certiorari in response to non-EPA parties.

Impact on the TCEQ: Since the U.S. Supreme Court denied certiorari in this case, the EPA can require the TCEQ to regulate pesticides under its NPDES delegation at least for “navigable water” of the United States. Although the Texas Department of Agriculture (TDA) currently regulates the use, application, licensing, labeling, registration, storage, and disposal of pesticides in Texas, the TCEQ has authority to regulate discharges of pollutants from a point source into any water in the state. This authority includes the authority to regulate aquatic pesticides classified as point-source pollutants by the 6th Circuit in this case. Finally, although there is overlapping jurisdiction between the TCEQ and the TDA on pesticide use, the TCEQ can be expected to have a more direct regulatory role in pesticide regulation in the state. The TCEQ issued its Pesticides General Permit (TXG870000) on Nov. 4, 2011 (eff. Nov. 2, 2011), for applications made into or over, including near, waters of the United States.

American Petroleum Institute v. Johnson
541 F. Supp. 2d 165 (D. D.C. 2008)

Case Summary: The U.S. District Court for the District of Columbia vacated the EPA’s definition of *navigable waters* in the Spill Prevention, Control, and Countermeasure regulations (SPCC Rule), 40 CFR 112. The regulations require certain oil-processing

facilities to prepare a plan to prevent oil spills and provide countermeasures to address discharges of oil into “navigable waters.” When the EPA amended the SPCC Rule in 2002, it adopted a broad definition of “navigable waters” that included all waters that “could affect interstate or foreign commerce,” tributaries to those waters, and adjacent wetlands.

Impact on the TCEQ: The case has potentially broader implications under the Clean Water Act (CWA), since the EPA’s regulatory definition of “navigable waters” under sections 402 and 404 of the CWA is the same language as the definition in the now-vacated SPCC Rule.

Entergy Corp. v. Riverkeeper, Inc.
129 S. Ct. 1498 (2009)

Case Summary: This case involves the EPA’s Phase II regulations governing cooling-water intake structures at certain large existing facilities. The EPA sets national performance standards requiring most Phase II facilities to reduce “impingement mortality for [aquatic organisms] by 80 to 95 percent from the calculation baseline,” and requiring a subset of facilities to reduce entrainment of such organisms by “60 to 90 percent from [that] baseline.” However,

the EPA expressly declined to mandate closed-cycle cooling systems, or equivalent reductions in impingement and entrainment, as it had done in its Phase I rules, in part because the cost of rendering existing facilities closed-cycle compliant would be nine times the estimated cost of compliance with the Phase II performance standards, and because other technologies could approach the performance of closed-cycle operation. The Phase II rules also permit site-specific variances from the national performance standards, provided that the permit-issuing authority imposes remedial measures that yield results as close as practicable to the applicable performance standards.

The court in this case determined that Section 316(b) of the Clean Water Act, which authorizes the

EPA to regulate cooling-water intake structures at power plants, does not prohibit the EPA from engaging in cost-benefit analysis. The court held that the EPA permissibly relied on cost-benefit analysis in setting the national performance standards for cooling-water intake structures at power plants and in allowing for cost-benefit variances from the standards for existing power plants.

Impact on the TCEQ: The ruling in this case offers guidance regarding the use of cost-benefit analysis by environmental agencies such as the TCEQ. It suggests that agencies may consider the costs and benefits of various technologies in setting best-technology-available standards for minimizing adverse environmental impacts, unless the applicable statute explicitly instructs otherwise. In the meantime, the TCEQ applies best professional judgment to determine best technology available.

Friends of the Everglades v.
South Florida Water Management District

570 F.3d 1210 (11th Cir. 2009); rehearing en banc denied, 605 F.3d 962 (11th Cir. 2010); cert. denied, 131 S. Ct. 643 (2010); cert. denied, *Miccosukee Tribe of Indians of Fla. v. S. Fla. Water Mgmt. Dist.*, 131 S. Ct. 645 (2010)

Case Summary: The issue was whether the transfer of water from one navigable body of water to another is a “discharge of a pollutant” within the meaning of the Clean Water Act, requiring a National Pollutant Discharge Elimination System (NPDES) permit. While the case was still pending, the EPA promulgated its NPDES Water Transfers Rule, which directly addressed the question presented in the case. In promulgating that rule, the EPA explained that it wanted to clarify that water transfers are not subject to regulation under the NPDES permitting program. The rule defines water transfers as an activity that conveys or connects waters of the United States without subjecting the transferred water to intervening industrial, municipal, or commercial use [NPDES Water Transfers Rule, 73 Fed. Reg. 33,697–708 (June 13, 2008) codified at 40 CFR 122.3(i)].

The court of appeals noted that the EPA’s regulation was entitled to deference if it was a reasonable construction of an ambiguous statute. The court concluded that the statutory language was ambiguous and moved on to consider whether the EPA’s regulation, which accepts the “unitary waters theory” that transferring pollutants between navigable waters is not an “addition . . . to navigable waters,” was a permissible construction of that wording. The court concluded that the EPA’s regulation adopting the “unitary waters theory” was reasonable, and therefore a permissible construction, and that unless the EPA rescinds or Congress overrides the regulation, the court must give effect to it.

This case is still pending before the 11th Circuit because of the multiple challenges to the EPA water-transfer rule. The cases were consolidated and the State of Texas joined Colorado and New Mexico’s amicus brief urging the 11th Circuit to apply the “plain language text” of the CWA in upholding the EPA’s water-transfer rule. A petition for certiorari was filed by Friends of the Everglades on Aug. 5, 2010. The petition was denied on Nov. 29, 2010.

On Aug. 23, 2011, the magistrate judge ordered the plaintiff to pay the district \$27,210.48 for costs incurred during the case (2011 WL 4402115). On Sept. 20, 2011, the district court reduced the amount owed to \$13,648.64 (865 F. Supp. 2d 1159). On April 30, 2012, the court of appeals affirmed the lower court’s order denying the Miccosukee Tribe’s motion for attorney’s fees and costs (678 F.3d 1199).

Impact on the TCEQ: Based on current regulation, the agency will not be required to issue TPDES permits to persons who wish to move water from one stream to another.

South Florida Water Management District v. Miccosukee Tribe of Indians
541 U.S. 95, 124 S. Ct. 1537 (2004); rehearing denied, 541 U.S. 1057 (2004)

Case Summary: The case involved the flood control and pumping operations of a water-management district within Florida’s Everglades. The 11th Circuit Court of Appeals had affirmed the district court’s

ruling that the pumping station between two canals required a National Pollutant Discharge Elimination System (NPDES) permit. The case was appealed to the U.S. Supreme Court and in 2003, the State of Texas filed an amicus brief supporting the South Florida Water Management District based on the premise that state law controls water-right allocations.

The U.S. Supreme Court held that a point source as defined by the Clean Water Act would not be exempt from NPDES permit requirements, because it did not itself add pollutants. The supreme court remanded the case to the district court and invited the parties to address the “unitary water theory,” which suggests that the discharge of unaltered water from one navigable water body to another would not require an NPDES permit because the definition of navigable waters includes all waters of the United States. The proceedings in this case were stayed pending appeal of the judgment in *Friends of the Everglades v. South Florida Water Management District* (a related action described above, involving similar parties). The stay order was appealed, but the court ruled that it lacked jurisdiction to hear the appeal of the district court’s stay order (559 F.3d 1191 [2009]).

Impact on the TCEQ: The TCEQ is monitoring the *Friends of the Everglades* case to assess the impact of this issue on TPDES permitting.

Northern Plains Resource Council v. Fidelity Exploration and Development Corp.
325 F.3d 1155 (9th Cir. 2003); cert. denied, *Fidelity Exploration and Production Co. v. Northern Plains Resource Council, Inc.*, 540 U.S. 967, 124 S. Ct. 434, 157 (2003)

Case Summary: In this case, the 9th Circuit held that the discharge of unaltered groundwater into surface water required a National Pollutant Discharge Elimination System (NPDES) permit, reasoning that, because the groundwater altered the quality of the receiving water, it was a pollutant. At issue was whether unaltered groundwater produced from the coal-bed methane extraction process was a “pollutant” under the Clean Water Act, and, if so, whether Montana state

law could exempt that water from the CWA's permitting requirements for discharge of a pollutant. The 9th Circuit concluded that the water was a pollutant subject to regulation under the CWA. Looking at the plain language of the statute, the court reasoned that the water was a pollutant because it was an industrial waste, even though it was unaltered groundwater, since *industrial waste* includes "any useless byproduct derived from the commercial production and sale of goods and services."

The court also determined that the water was a "pollutant" under EPA regulations governing "produced water," even if extraction did not add any pollutants to the water. The court focused on the effect of the discharge on the receiving water, citing the CWA's "antidegradation policy," and found that discharge of the water caused pollution under the CWA because it altered the quality of the receiving water. The court explained that the CWA's requirement that the physical, biological, or chemical integrity of the water be a "man-induced" alteration refers to the effect of the discharge on the receiving water; it does not require that the discharged water itself be altered by humans.

After concluding that the discharge of unaltered groundwater was subject to regulation under the CWA, the court concluded that neither the EPA nor the state of Montana had authority to exempt discharges otherwise subject to the CWA, because only Congress may amend the CWA to create exemptions from regulation. In the latest action, the 9th Circuit vacated the lower court's order imposing sanctions on Northern Plains Research Council (185 Fed. Appx. 679).

Impact on the TCEQ: This case has the potential to affect the types of discharges that require authorization under a TPDES permit issued by the TCEQ. Although the RRC regulates discharges associated with oil, gas, and geothermal exploration and development in Texas, this opinion is broad enough to encompass discharges of unaltered groundwater into surface water. Parties whose operations involve infiltrated or extracted groundwater that will be discharged into waters of the state may need to obtain a TPDES permit if the discharge affects the chemical, physical, or

biological integrity of the receiving waters. This could become an issue if the agency receives an application from a regulated entity, not subject to RRC jurisdiction, for a permit to discharge unaltered groundwater into surface water.

The Piney Run Preservation Association v. County Commissioners of Carroll County, Md.
523 F.3d 453 (4th Cir. 2008); cert. denied, 129 S. Ct. 258 (U.S. Oct. 6, 2008) (No. 08-96)

Case Summary: The association filed suit alleging that county commissioners violated the Clean Water Act by discharging treated wastewater into a stream that exceeded the thermal limitation set forth in the county's National Pollutant Discharge Elimination System (NPDES) permit. The 4th Circuit Court of Appeals held that, because the Maryland Department of the Environment was diligently pursuing an enforcement action against a county for violating the thermal limitation set forth in its NPDES permit for its wastewater treatment plant, the association was precluded from bringing a citizen suit against the county under the CWA. In its analysis of the arguments, the court noted that the CWA enforcement prosecutions will ordinarily be considered "diligent" if the judicial action "is capable of requiring compliance with [the CWA] and is in good faith calculated to do so," and further observed that there is a presumption of diligence arising from an agency enforcement action.

Impact on the TCEQ: The ability to file a citizen suit under the CWA where the TCEQ is diligently pursuing an enforcement action for the same violation is precluded by this case.

Rapanos v. United States
547 U.S. 715, 126 S. Ct. 2208 (2006)

Case Summary: This case addressed the scope of the U.S. Army Corps of Engineers' authority to regulate navigable waters under Section 404 of the Clean Water Act (CWA). The case resulted in a plurality opinion, with two tests for determining whether certain waters are jurisdictional waters for purposes of Section 404(b) of the CWA. The plurality held that,

due to the difficulty involved in drawing the line between wetlands and traditional navigable waters, “waters of the United States” includes those wetlands with a continuous surface connection to bodies that are “waters of the United States” in their own right. Justice Kennedy’s concurring opinion set forth a “significant nexus” test, which states that if a water body substantially affects the physical, chemical, and biological integrity of the navigable water body, then it is jurisdictional.

The 6th Circuit later remanded the case that was consolidated with *Rapanos, Carabell v. U.S. Army Corps of Engineers*, to the lower court so the case could be remanded to the Corps for further processing in accordance with the *Rapanos* decision (217 Fed. Appx. 431).

Impact on the TCEQ: This holding addresses the scope of waters covered under the definition of “waters of the United States.” The TCEQ is the agency charged with implementing Texas’ Surface Water Quality Standards, as required by the CWA. Texas wetlands play an important role in protecting surface water quality in Texas. Many of Texas’ streams and associated wetlands are non-navigable and as such may not be federal jurisdictional water, depending on whether they are adjacent to jurisdictional wetlands. Corps of Engineers jurisdictional determinations for wetlands may affect the chemical, physical, and biological integrity of downstream navigable waters, and may require adjustments to TCEQ water quality planning.

The TCEQ is responsible for conducting Section 401 water quality certifications of the Corps Section 404 permits for discharge of dredged or fill material into waters of the United States, including wetlands. The purpose of these reviews is to determine whether a proposed discharge will comply with state water quality standards. The determination of whether certain waters are jurisdictional will determine which permits require these certifications.

In April 2011, the EPA published a draft guidance that sets out how the EPA and the U.S. Army Corps of Engineers (USACE) will identify waters protected by the Clean Water Act (CWA) and implement the supreme court’s decisions concerning the

extent of waters covered by the CWA in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* and *Rapanos v. United States* as well as *United States v. Riverside Bayview Homes*. The EPA also plans to engage in rulemaking after the draft guidance is finalized. An unofficial version of the proposed rule aimed at redefining jurisdictional waters under the CWA is currently being circulated.

S.D. Warren Co. v. Maine Board of Environmental Protection 547 U.S. 370 (2006)

Case Summary: Under Section 401 of the federal Clean Water Act, companies must obtain a state water quality certification of any activity requiring a federal dam license that may result in a discharge into navigable waters. In this case, the U.S. Supreme Court ruled that operation of a dam to produce hydroelectricity may result in a “discharge” into the navigable waters of the United States for purposes of Section 401 of the Clean Water Act, and accordingly a federal license for such a dam requires state certification that the dam will not violate water-protection laws.

Impact on the TCEQ: The TCEQ is the agency responsible for conducting Section 401 water quality certification reviews. This case requires the TCEQ to perform certification reviews for dam operations. Note that, under TCEQ rules, Section 401 certification may be waived.

National Pork Producers Council et al. v. U.S. Environmental Protection Agency 635 F.3d 738 (5th Cir. 2011)

Case Summary: The case involved an environmental group’s challenge to EPA rules regarding concentrated animal feeding operations (CAFOs). The case arose from EPA attempts to address *Waterkeeper Alliance v. U.S. Environmental Protection Agency*, 399 F.3d 486 (2d Cir. 2005). In the *Waterkeeper* case, the 2nd Circuit found that the Clean Water Act prevents the EPA from imposing on CAFOs the obligation to seek a National Pollutant Discharge Elimination System (NPDES) permit or to demonstrate that there is no potential for discharge.

In 2008, in response to *Waterkeeper*, the EPA promulgated revised rules. The revised rule established the CAFOs that must apply for NPDES permit coverage and when they must do so. The 2008 rule eliminated the 2003 rule’s requirement that all CAFOs apply for NPDES permits unless they demonstrate that they have “no potential to discharge” and instead required only those CAFOs that “discharge or propose to discharge” to seek permit coverage. Further, the 2008 rule created a requirement that any CAFO operator with the potential to discharge either: (1) apply for permit coverage, or (2) operate in accordance with a set of so-called “eligibility criteria” that incorporated the same conditions (effluent limitations) that would be imposed under a permit.

Petitioners representing the pork, poultry, and dairy industries sought judicial review of the revised rules. The petitioners argued that under the Clean Water Act, the EPA may only regulate actual discharges, not “proposed” discharges, as promulgated in the 2008 rules. The 5th Circuit agreed with the petitioners and remanded that part of the 2008 rules to the EPA. Effective July 30, 2012, the EPA adopted amended rules to remove the portions of its rules vacated by the 5th Circuit’s decision.

Impact on the TCEQ: The TCEQ has independent regulatory authority to require all CAFOs to obtain permits, including those with only a potential to discharge. Current TCEQ regulations allow the discharge of manure, sludge, or wastewater from management units or retention control structures into water in the state under certain conditions (e.g., chronic or catastrophic rainfall events). Absent such an event, a discharge of wastewater is prohibited. This case is therefore not likely to affect the agency’s administration of the CAFO program.

The agency is currently finalizing rulemaking to incorporate relevant aspects of the EPA’s CAFO rules. Furthermore, *Rose Acre Farms, Inc. v. North Carolina Department of Environment and Natural Resources*, No. 12-CVS-10 (N.C. Super. Ct.—2d Dist. Jan. 4, 2013), leaves the door open for national permits by finding that biological materials that are blown into a water body from a chicken farm could provide the basis for an NPDES permit.

Florida Wildlife Federation v. Jackson

853 F. Supp. 2d 1138 (N.D. Fla. 2012); appeal dismissed, 737 F.3d 689 (11th Cir. 2013)

Case Summary: Florida’s criterion for nutrients had been narrative. Specifically, Florida’s rules provided that “[i]n no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna” (Florida Administrative Code r. 62–302.530[47][b]). Environmental groups sued the EPA in July 2008 to force the EPA to adopt numeric nutrient criteria for Florida. In August 2009, the environmental groups and the EPA entered into a consent decree that required the EPA to propose numeric nutrient criteria for Florida by Jan. 14, 2010. On Jan. 26, 2010, the EPA published *Water Quality Standards for the State of Florida’s Lakes and Flowing Waters* (75 Fed. Reg. 4174 [2010]).

The proposal was the EPA’s first effort to establish numeric nutrient criteria for any state under Section 303 of the CWA. The proposed freshwater nutrient criteria are intended to address the first of these commitments. The draft rule, which EPA developed in collaboration with the state of Florida, would establish a series of numeric concentrations for phosphorus and nitrogen in four freshwater body types: lakes, rivers and streams, springs and clear streams, and canals. Each water-body type would be assigned its own water quality criterion based on the EPA’s analysis of nutrient concentrations in representative waters within the state. The proposed criteria thus represent the EPA’s assessment of the ambient nitrogen and phosphorus levels that are necessary in order to achieve the water quality objectives (designated uses) in each type of freshwater system.

The EPA sought to amend the consent decree to have the state’s new nutrient criteria apply across the board, including those criteria that are not numeric, because it believed the criteria complied with the CWA. The environmental groups objected. The court held that a modification was appropriate because Florida’s adoption of new nutrient criteria was a significant change of facts and law that warranted a modification based on precedent. The environmental

groups also moved for enforcement of the decree based on two other issues, which the court denied. (2014 WL 51360 [Jan. 7, 2014]).

Impact on the TCEQ: If the EPA were to determine that the TCEQ’s nutrient criteria are not consistent with the CWA, the EPA could promulgate water quality standards similar to Florida’s in Texas. The TCEQ has general nutrient criteria and site-specific numeric nutrient criteria related to chlorophyll *a* for certain lakes and reservoirs. The EPA approved the chlorophyll *a* numeric nutrient criteria for most of the reservoirs in the 2010 version of the TSWQS. The reservoirs for which the EPA disapproved the numeric nutrient criteria were removed from the standards in the 2014 revisions adopted by the commission on Feb. 12, 2014. The EPA was largely complimentary of the TCEQ’s efforts in adopting the numeric nutrient criteria, therefore it is unlikely that the EPA will promulgate a numeric nutrient standard for Texas at this point.

Conoco Phillips Co. et al. v. U.S. Environmental Protection Agency et al.
612 F.3d 822 (5th Cir. 2010)

Case Summary: Oil companies and environmental organizations challenged the EPA’s final Phase III rules relating to cooling water intake structures (CWIS) at existing and new offshore oil and gas extraction facilities. The EPA published the final Phase III rule on June 16, 2006 (71 FR 35040), pursuant to Section 316(b) of the Clean Water Act (CWA), which directs the EPA to promulgate rules requiring that “location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.” 33 USC 1326(b). Environmental petitioners (Riverkeeper) challenged the rules as they apply to existing facilities, and industry petitioners (Conoco Phillips) challenged the final rules as they applied to new facilities.

Riverkeeper and the EPA jointly filed a motion to remand the rule as it applies to existing facilities in light of the supreme court’s decision in *Entergy Corp. v.*

Riverkeeper, Inc., 556 U.S. 208 (2009). The 5th Circuit Court of Appeals granted the motion to remand.

Conoco Phillips continued to challenge the final rule as it relates to new facilities, arguing that the EPA’s decision was arbitrary and capricious in failing to consider facility location, or to perform the requisite cost-benefit analysis. The court of appeals rejected the challenges and held that 316(b) requires the EPA to consider the location of the CWIS, and not necessarily the location of the facility. Second, the court of appeals, relying on the court’s *Entergy* decision, held that the EPA has the authority to consider costs under CWA 316(b), but is not *required* to do so.

On April 20, 2011, the EPA proposed rulemaking combining Phase II and Phase III into one rulemaking to protect aquatic organisms affected by cooling water intake structures (76 FR 22174 [April 20, 2011]). The comment period closed on Aug. 18, 2011 (76 FR 43230 [July 20, 2011]). Notice of the final rule will be published in the *Federal Register* on or before April 17, 2014.

Impact on the TCEQ: The TCEQ will need to incorporate the Phase II requirements into the agency rules regulating best technology available to minimize adverse environmental impact for cooling water intake structures. The Phase III rule requirements will be incorporated as needed to issue water quality certifications related to new offshore oil and gas extraction facilities.

Northwest Environmental Defense Center v. Brown
640 F.3d 1063 (9th Cir. 2011); **reversed sub nom.,**
Decker v. N.W. Envtl. Def. Ctr., 133 S. Ct. 1326 (2013);
reversed sub nom., *Ga.-Pac. W., Inc. v. N.W. Envtl. Def. Ctr.*, 133 S. Ct. 1326 (2013)

Case Summary: The Northwest Environmental Defense Center (NEDC) sued the Oregon State Forester and members of the Oregon Board of Forestry and various timber companies, asserting that “storm-water runoff from logging roads that is collected in a system of ditches, culverts, and channels, and is then delivered into streams and rivers, is a point-source discharge subject to National Pollutant Discharge Elimination System (NPDES) permitting under the CWA.” The defendants “contend that the Silvicultural

Rule exempts such runoff from the definition of point-source discharge, and thus exempts it from the NPDES permitting process. Alternatively, the defendants contend that the 1987 amendments to the CWA and regulations implementing those amendments also exempt such runoff from the definition of point-source discharge and from the permitting process.”

The court held that “stormwater runoff from logging roads that is collected by and then discharged from a system of ditches, culverts, and channels is a point-source discharge for which an NPDES permit is required.” In addition, the court held that the “1987 amendments to the CWA do not exempt from the NPDES permitting process stormwater runoff from logging roads that is collected in a system of ditches, culverts, and channels, and is then discharged into streams and rivers. This collected runoff constitutes a point-source discharge of stormwater “associated with industrial activity” under the terms of sections 502(14) and 402(p). Such a discharge requires an NPDES permit.” The court explained that “if [logging] activity is industrial in nature, and EPA concedes that it is [see SIC 2411], EPA is not free to create exemptions from permitting requirements for such activity.” Petitions for certiorari were filed on Sept. 13, 2011.

In June 2012, the EPA published a “Notice of Proposed Revisions to Stormwater Regulations to Clarify that an NPDES Permit Is not Required for Stormwater Discharges from Logging Roads.” The abstract stated that

[t]he EPA intends to propose revisions to its Phase I stormwater regulations (40 CFR 122.26) to clarify that stormwater discharges from logging roads do not constitute stormwater discharges associated with industrial activity and that a National Pollutant Discharge Elimination System (NPDES) permit is not required for these stormwater discharges. EPA is taking this action in response to the 9th Circuit Court of Appeals decision in Northwest Environmental Defense Center (NEDC) v. Brown, which addressed the question of whether discharges from certain logging roads require National

Pollutant Discharge Elimination System (NPDES) permits. The Agency intends to clarify that a permit is not required for these discharges.

The EPA later adopted the amendment to Section 122.26(b)(14)(iii), making it effective on Jan. 7, 2013 (77 Fed. Reg. 72970).

The U.S. Supreme Court granted certiorari in the case and ultimately reversed the lower court’s ruling. The court held that the rule amendment did not make the present case moot, as there was still a live controversy as to whether the logging companies were liable for illegal discharges under the old rule that governed them. It also deferred to the EPA’s interpretation of “associated with industrial activity,” finding it reasonable that the EPA believed that logging activities are “directly related” only to harvesting and not to manufacturing, processing, or storage.

The EPA has been consistent in its interpretation of the rule, and the regulatory scheme lends itself to the reasonable interpretation that the rule applies to traditional industrial buildings and related sites. The court remanded the case for proceedings consistent with its ruling. On Aug. 30, 2013, the 9th Circuit vacated the district court’s ruling and remanded the case for further proceedings (728 F.3d 1085).

While the parties were awaiting the supreme court’s decision, the NEDC filed another lawsuit with the 9th Circuit challenging the EPA’s stormwater discharge rule amendment. The NEDC and the EPA filed a joint motion on Feb. 5, 2013, asking the court to extend the briefing schedule so that the new rule would not be litigated while the case regarding the old rule was being decided by the supreme court.

Impact on the TCEQ: The U.S. Supreme Court’s ruling maintains the status quo, so the decision should not affect the TCEQ other than to validate the EPA’s logging-road policy. Petitions for review have been submitted to the supreme court. The supreme court sought briefing from the EPA in December 2011. The TCEQ is closely monitoring this case. If this decision stands, the TCEQ would have to revise its TPDES program to require authorization for the silvicultural activities described in the case.

Edwards Aquifer Authority v. Day**369 S.W.3d 814, 2012 WL 592729 (Tex.)**

Case Summary: This case is an appeal of the denial of an application to the Edwards Aquifer Authority (EAA) to pump water for irrigation. The Days had requested approximately 700 acre-feet of groundwater for irrigation. An administrative law judge recommended that a permit be issued for only 14 acre-feet of groundwater because the groundwater that was pumped from the well, to a ditch, and then sent into a lake before it was pumped out on the fields became state water not regulated by the EAA. The 14 acre-feet of groundwater that was allowed went from the well, to a ditch, straight to the fields. The EAA issued this ruling in a final order. The issues were whether the groundwater became state water when it entered the watercourse, and whether Day had a vested right in the groundwater that could be the subject of a “taking.”

In the trial court, both sides filed motions for summary judgment. The trial court granted the Days’ motion and reversed and remanded to the EAA to issue permits in a larger amount (the amount to irrigate 150 acres of land), finding that the groundwater that went in the lake was still groundwater. The trial court did not grant the EAA’s motion for summary judgment on the Days’ “takings claims,” in which it had argued that the Days did not have a vested right to the groundwater. The court of appeals held that the water became surface water when it entered the watercourse and that the Days did have a vested right to the groundwater under their land. The court remanded to the EAA to render judgment affirming the EAA’s final order.

Both parties filed a petition for review in the Texas Supreme Court in February 2009. Additionally, the State of Texas filed a Response to the Petition for Review on May 20, 2009, on the specific issue of the legal status of groundwater and when it is considered state surface water for the purpose of administering water rights. The case was argued in the Texas Supreme Court on Feb. 17, 2010.

The supreme court issued an opinion on Feb. 24, 2012. The court affirmed the court of appeals and

remanded for further proceedings. The court held that groundwater is a vested real property right in place, and therefore the EAA’s actions were subject to taking claims. The court held that it did not have enough information on which to rule on the Days’ taking claim and remanded to the trial court on that issue.

Concerning the groundwater becoming a surface water issue, the supreme court agreed with the court of appeals that because the Days had not exercised any control over the groundwater that was put into the watercourse, the groundwater did become surface water. The court cited a statute related to authorization to convey and reuse groundwater-based effluent—Texas Water Code, Section 11.042(b)—for the proposition that the groundwater would remain groundwater if the Days had obtained that authorization for it.

Impact on the TCEQ: The supreme court affirmed the holding that once groundwater enters a watercourse, it becomes state water unless the owner exercises control over the groundwater or has obtained authorization to transport the groundwater. If the court had held otherwise, it could have affected the water-rights program. The issue of the reuse of groundwater was not directly addressed in the opinion. Additionally, it may be argued that the standards set out in this case for a taking apply to other agencies and their actions in other programs.

Sackett v. U.S. Environmental Protection Agency**132 S. Ct. 1367 (2012) (No. 10-1062)**

Case Summary: Michael and Chantell Sackett (Sacketts) owned .63 acres of undeveloped property in Idaho near Priest Lake. In April and May 2007, the Sacketts filled in about one-half acre of their property with dirt and rock in preparation for building a house. On Nov. 26, 2007, the EPA issued a compliance order against the Sacketts, alleging the property was a wetland subject to the CWA and that the Sacketts had violated the CWA by filling in the property without first obtaining a permit. The Sacketts requested a hearing to challenge the finding, but the EPA refused and continued to assert jurisdiction over the property.

The Sacketts filed a lawsuit against the EPA under the federal Administrative Procedures Act (APA), seeking injunctive and declaratory relief. The Sacketts challenged the compliance order, arguing that it was (1) arbitrary and capricious under the APA, (2) issued without a hearing in violation of the Sacketts' procedural due process rights, and (3) issued on the basis of an "any information available" standard that is unconstitutionally vague.

The Sacketts brought suit under Chapter 7 of the APA, which provides for judicial review of a "final agency action for which there is no other adequate remedy in a court." The Sacketts argued that compliance orders are judicially reviewable prior to the EPA filing an enforcement action in federal court despite the CWA not providing for pre-enforcement judicial review of compliance orders. The 9th Circuit held that congressional intent to preclude the pre-enforcement judicial review of compliance orders was "fairly discernible in the statutory scheme" and, therefore, such orders are not subject to judicial review. The court also held that preclusion of judicial review did not violate the Sacketts' due process. The Sacketts appealed to the U.S. Supreme Court.

The court found that the compliance order had many attributes of "finality" that previous supreme court cases had established. The order determined rights or obligations, legal consequences "flowed" from issuance of the order, and issuance of the order marked the "consummation" of the EPA's decision-making process. The court also concluded that the Sacketts had no other adequate remedy in a court because judicial review of CWA enforcement cases usually comes by way of a civil action brought by the EPA, but the Sacketts were unable to initiate this process and faced fines for every day the order was not complied with. Furthermore, a remedy that could be obtained from another agency is not considered to be an adequate remedy with respect to the agency at which the original case arose.

Finally, the court found that the CWA did not preclude pre-enforcement judicial review either expressly or by inference. Therefore, the court held that

the Sacketts may bring a civil action under the APA challenging the issuance of the EPA's order because the order was a final agency action for which there is no adequate remedy other than APA review, and the CWA did not preclude that review. In the latest action, the 9th Circuit remanded the case to the district court for processing pursuant to the supreme court's opinion (677 F.3d 1000 [2012]).

Impact on the TCEQ: In this case, the court decided only the issue of whether pre-enforcement judicial review of an EPA compliance order is available under the CWA. By holding that pre-enforcement judicial review is available, the court essentially overruled a long line of circuit court cases reaching the opposite conclusion.

The court expressly refused to opine on the jurisdictional reach of the CWA. However, from "waters of the United States" perspective, this case may very well be remembered and cited in the future for Justice Alito's concurring opinion in which he criticized the EPA's guidance on determining which waters are jurisdictional and therefore subject to the CWA and calling on Congress to act by providing "a reasonably clear rule regarding the reach of the Clean Water Act." Justice Alito noted that "[t]he Court's decision provides a modest measure of relief. At least, property owners like petitioners will have the right to challenge the EPA's jurisdictional determination under the Administrative Procedures Act. But the combination of the uncertain reach of the Clean Water Act and the draconian penalties imposed for the sort of violations alleged in this case still leaves most property owners with little practical alternative but to dance to the EPA's tune."

Chester L. Slay, Jr. v. Texas Commission on Environmental Quality

351 S.W.3d 523 (Tex. App.—Austin 2011, pet. denied); 11-0819 (Tex. Sup. Ct., rehearing denied, January 2012)

Case Summary: The facts of the enforcement action concern a 17-acre island in the Sabine River near Port Arthur that was a former barge-cleaning facility and MSW disposal site for the City of Port

Arthur. The barge-cleaning activities involved several large aboveground storage tanks that were used to store hazardous waste removed from barges. The tanks and associated secondary containment were causing IHW discharges. The violations included failure to label, inspect, assess, and certify secondary containment; failure to conduct spill-closure or remediation activities; failure to perform hazardous waste determinations; failure to notify the TCEQ of the storage of industrial waste; and failure to obtain a permit to store hazardous waste. After an administrative hearing, the administrative law judge found that Mr. Slay was responsible for the violations and the TCEQ assessed an administrative penalty.

Mr. Slay appealed, attacking the agency's penalty policy—claiming that the penalty policy was a rule rather than a penalty matrix or agency guidance policy. As such, Mr. Slay argued that the TCEQ's penalty policy should not be used to impose a penalty against him because it lacked procedural requirements required in the rulemaking process. The 3rd Court of Appeals held that the penalty policy was not a rule. In its ruling, the court held that the TCEQ's commissioners were not bound to follow the penalty policy when exercising their discretion to impose administrative penalties. Mr. Slay petitioned the Texas Supreme Court for review. His petition for review was denied on Jan. 13, 2012.

Impact on the TCEQ: This ruling is consistent with TCEQ policies that further support the contention that its penalty policy is used by staff to make non-binding penalty recommendations to TCEQ commissioners. The commissioners may act on the penalty recommendation of staff with regard to penalty amounts or they may choose to impose an alternative penalty amount. Since the penalty policy was determined not to be a rule, the TCEQ has the ability to amend its penalty policy periodically to adjust to legislative changes or enforcement objectives without the delay and binding impact associated with agency rulemaking and implementation. In addition, it allows the TCEQ commissioners the flexibility to impose a penalty consistent with the facts relevant to the violation(s).

State of Texas v. MOEX Offshore 2007, LLC
No. D-1-GV-12-000181; 353d Dist. Ct., Travis
County, Tex. (filed Feb. 12, 2012)

Case Summary: The Office of the Attorney General filed a petition against MOEX Offshore 2007, LLC (MOEX), for state civil penalties under Texas Water Code 26.121(a) and Texas Natural Resources Code 40.251(c), and for attorneys' fees related to the Deepwater Horizon oil spill on April 20, 2012. The United States and the State of Texas (along with the other four Gulf Coast states: Louisiana, Mississippi, Alabama, and Florida) have collectively reached agreement for settlement of civil penalties against MOEX. The United States has lodged a federal consent decree to resolve MOEX's civil penalties under the Clean Water Act and each Gulf Coast state, including Texas, has negotiated separate releases and covenants not to sue for state civil penalties with MOEX.

Impact on the TCEQ: The MOEX settlement includes \$3.25 million in federal Clean Water Act penalties to be spent in Texas on two federally administered supplemental environmental projects (SEP) as per the terms of the federal consent decree. The first project includes acquisition of a tract on South Padre Island within the Laguna Atascosa National Wildlife Refuge. The second project includes acquisition of Big Tree Ranch, which connects the Aransas National Wildlife Refuge and Goose Island State Park, protecting critical habitat for whooping cranes and neo-tropical migratory birds. Finally, the settlement includes \$3.25 million in state civil penalties, resolving the state's claims under Texas Water Code 26.121(a) and Texas Natural Resources Code 40.251(c).

City of Waco v. Texas Commission on Environmental Quality
Cause No. D-1-GV-08-000405 (filed March 3, 2008)
and Cause No. D-1-GV-08-000667 (filed April 11, 2008)

Case Summary: Waco claims that waste from the O-Kee Dairy severely affects the quality of the water in Lake Waco, thereby damaging the city's public water supply and jeopardizing the health and welfare of its citizens who consume the water and engage in recreation in Lake Waco. The dairy is located in the

North Bosque River watershed and is approximately 90 downstream miles from Waco’s drinking-water intakes on Lake Waco.

The lawsuit claims the TCEQ acted arbitrarily and capriciously when the commission found that Waco was not an affected person and denied their contested-case hearing request on the permit application of Jewel Alt and Oene Keuning dba O-Kee Dairy for a CAFO individual permit. The district court affirmed the TCEQ’s determination on Nov. 24, 2008, that Waco was not an affected person. Waco appealed and an appellate court panel overturned the district court decision on June 17, 2011. The TCEQ filed a petition for review with the Texas Supreme Court on Sept. 16, 2011. Waco filed a response to the petition on Nov. 14, 2011, and the TCEQ filed a reply brief on Dec. 13, 2011. Filings on the merits were also submitted by the TCEQ on March 27, 2012, and by Waco on May 11, 2012. The TCEQ’s reply brief is due May 29, 2012. The court denied the petition on June 29, 2012. The TCEQ filed a motion for rehearing on Aug. 15, 2012. The court ultimately granted review on Feb. 1, 2013, and heard the matter on Feb. 28, 2013, and issued its decision on Aug. 23, 2013.

In its opinion, the Texas Supreme Court reversed the decision of the court of appeals. The supreme court relied on the exceptions in Section 26.028(d) of the Texas Water Code regarding when the TCEQ has to offer an opportunity for a contested-case hearing. Section 26.028(d)(1) states, in part, that the commission may approve a permit application to renew or amend a permit without a contested-case hearing if the applicant is not applying to increase significantly the quantity of waste that is authorized to be discharged or does not materially change the place and pattern of discharge. Though the permit application sought an increase in dairy cows from 690 to 999, thereby increasing the amount of waste generated, the court reasoned that the controls and requirements and additional TCEQ oversight being implemented in the permit (due to the 2004 CAFO rule revisions) would limit the amount of waste being discharged into the North Bosque watershed despite the increase in animals.

The court concluded that the amended permit did not seek to significantly increase or materially change the authorized discharge of waste or otherwise foreclose commission discretion to consider the amended application at a regular Commissioners’ Agenda meeting rather than after a contested-case hearing. Therefore, the court found that the TCEQ did not abuse its discretion in denying Waco’s request for a contested-case hearing on the application.

The court was silent on the issue of whether Waco was, in fact, an affected person under TCEQ rules. However, the court did state that the determination by the commission on who is an affected person is not part of the contested-case hearing. On page 14 of the opinion, the court stated, “The Commission’s evaluation of the request is thus a threshold determination of whether the party is an ‘affected person’ but by rule that determination ‘is not itself a contested case subject to the APA.’ *See id.* § 55.211(a).” The court found that even for permits that the TCEQ considers as major amendments, the exceptions in Section 26.028(d) still apply, and if the permit amendment meets those exceptions, no contested-case hearing is necessary.

The court reached the same decision in *Bosque River Coalition v. TCEQ*, 413 S.W.3d 403 (Tex. 2013). A petition for rehearing was also denied in that case on Nov. 22, 2013.

Impact on the TCEQ: The Texas Supreme Court’s opinion opens the door to the possibility that certain major amendment applications do not have to be referred to SOAH even if the hearing-request requirements are met. It may also bring an end to referring cases to SOAH solely to determine if a hearing requestor is an affected person. The outcome of this case could affect how the TCEQ determine who is an affected person under TWC, Ch. 5, and agency rules.

Specifically, the TCEQ’s interpretation and implementation of the requirements for an affected person for purposes of a contested-case hearing is being challenged. If the appellate court decision is allowed to stand, the TCEQ would be required to conduct an evidentiary hearing on the merits of whether an entity or person is an affected person if the requestor has

submitted evidence, such as an affidavit, with his or her hearing request in support of his or her affected-person status. This would remove the agency’s discretion to make a preliminary jurisdictional determination to refer a case to SOAH and would likely combine the analysis for an affected-person determination with the factual hearing on the merits.

Pending Cases

EPA Water-Transfer Rule and Cases Challenging the Rule

– Rule became effective Aug. 12, 2008

The EPA water-transfer rule excludes water transfers from regulation under the National Pollutant Discharge Elimination System (NPDES) permitting program. The rule defines water transfer as an activity conveying or connecting waters of the United States without intervening industrial, municipal, or commercial use. The EPA reasoned that, based on the language of the CWA, a water transfer (as defined) does not constitute an “addition” of a pollutant into waters of the United States; “addition” requires a point source to introduce the pollutant, and the pollutant is already present in the waters of the United States. Also, the CWA provides mechanisms outside of the NPDES program to control pollution from water transfers. Requiring permits for water transfers would interfere with the states’ prerogative to regulate water transfers under state law.

Lawsuits Directly Challenging the Rule in Federal District Courts

Friends of the Everglades v.

U.S. Environmental Protection Agency

No. 08-13652-CC (11th Cir., consolidated Sept. 10, 2008) (pending)

Catskill Mountains Chapter of Trout Unlimited, Inc. v. U.S. Environmental Protection Agency

No. 08-cv-05606-KMK (S.D. N.Y., consolidated Oct. 8, 2008) (stayed at 630 F. Supp. 2d 295)

Friends of the Everglades v. United States

No. 08-cv-21785-CMA (S.D. Fla., consolidated Sept. 18, 2008) (stayed)

Lawsuits Challenging the Rule in the 11th Circuit Court of Appeals

Friends of the Everglades v.

U.S. Environmental Protection Agency

Nos. 08-13652-CC, 08-13653-CC, 08-13657-CC, 08-14921-CC, 08-16270-CC, 08-16283-CC, and 09-10506

Case Summary: On May 6, 2011, a three-judge panel ruled on various motions of the parties, as follows:

1. Denied the EPA’s motion for summary denial of petitions challenging the EPA’s water transfers rule without prejudice.
2. Denied various parties’ motions to dismiss or transfer petitions for review of the EPA’s water transfer rule to district court for lack of subject matter jurisdiction without prejudice.
3. Denied Colorado and New Mexico’s (joined by Alaska, Nevada, South Dakota, Utah, and Wyoming) motion for reconsideration of the denial of their motion to intervene.
4. Ordered parties to submit briefs addressing jurisdiction and merits.

On Oct. 26, 2012, the court dismissed the petitions for lack of subject-matter jurisdiction (699 F.3d 1280). A summary of the court’s ruling can be found below.

Impact on the TCEQ: If the court upholds the EPA’s water transfer rule, the agency will not be required to issue TPDES permits for persons who wish to transfer water from navigable water to another.

State of New Mexico v. United States

Docket No. 11-cv-691JP; U.S. Dist. Ct., N.M.

Case Summary: New Mexico sued the United States of America, particularly the Bureau of Reclamation, on Aug. 8, 2011, complaining of its operation of the Rio Grande Project (Elephant Butte and Caballo Reservoirs in New Mexico) and of an operating agreement entered into in 2008. The court ordered

the El Paso District and Elephant Butte Irrigation District in New Mexico to be parties in the case. New Mexico contends that Texas is illegally taking millions of gallons of New Mexico's Rio Grande water under the 2008 agreement between the U.S. Bureau of Reclamation and irrigators in southern New Mexico and El Paso. The agreement dictates how water will be accounted for and released from Elephant Butte. The court has not ruled on this case, possibly because Texas has sued New Mexico in other lawsuits, most recently in the U.S. Supreme Court, challenging New Mexico over the Rio Grande Project operations.

Impact on the TCEQ: There is a Rio Grande Compact that allocates the water in the project, but the operation of the reservoirs is still contentious. Texas' interest is in obtaining all of its authorized water from the project. This claim, if upheld, could significantly affect Texas' rights under the Rio Grande Compact and water supplies to Rio Grande water users, including the City of El Paso.

State of New Mexico v. United States of America et al. U.S. Dist. Ct., N.M.

Case summary: The State of New Mexico has filed suit to invalidate an operating agreement executed in 2008 by the Bureau of Reclamation, Elephant Butte Irrigation District (New Mexico), and the El Paso Water Improvement District No. 1 (Texas). The operating agreement was executed after 20 years of negotiations to ensure that the parties' rights under the Rio Grande Project and the Rio Grande Compact are protected. New Mexico's continued expansion of groundwater pumping since the date of the compact continues to deplete Texas' water supplies. The operating agreement served as a compromise on this issue. New Mexico asserts that the Bureau of Reclamation violated terms of the Rio Grande Compact in delivering water to the two irrigation districts in 2011. The court has not ruled on this case, possibly because Texas has sued New Mexico in other lawsuits, most recently in the U.S. Supreme Court, challenging New Mexico over the Rio Grande Project operations.

Impact on the TCEQ: This claim, if upheld, could significantly affect Texas' rights under the Rio Grande Compact and water supplies to our Rio Grande water users, including the City of El Paso.

State of Texas v. State of New Mexico and State of Colorado U.S. Sup. Ct., Docket No. 220141

Case Summary: On Jan. 8, 2013, the State of Texas sought leave to file a complaint against New Mexico to enforce its rights under the Rio Grande Compact. In 1929, Congress authorized Colorado, New Mexico, and Texas to negotiate an apportionment of the waters of the Rio Grande. The parties signed the Rio Grande Compact in 1938. The compact apportions water of the Rio Grande basin among the states of Colorado, New Mexico, and Texas. Colorado delivers a specified quantity of water to New Mexico, and New Mexico is required to deliver a specified quantity of water to the Elephant Butte Reservoir. Texas argues that New Mexico has depleted Texas' equitable apportionment under the compact by allowing diversion of surface water and pumping of groundwater that is hydrologically connected to the Rio Grande below Elephant Butte, diminishing the amount of water that flows into Texas. The supreme court granted leave to file the complaint on Jan. 27, 2014.

Impact on the TCEQ: If Texas prevails, New Mexico will be required to send more water to Texas under the Rio Grande Compact for irrigation and municipal use.

Northwest Environmental Advocates v. Gutierrez No. 3:09-cv-17 (D. Or., filed Jan. 6, 2009)

Case Summary: This case relates to Oregon's coastal nonpoint-source pollution-control plan under the Coastal Zone Act Reauthorization Amendments of 1990. On Dec. 19, 2008, the Northwest Environmental Advocates (NWEA) submitted to the National Oceanic and Atmospheric Administration (NOAA) and the EPA a notice of intent to sue if the agencies could not prove that they consulted under Section 7 of the Endangered Species Act when conditionally approving and fully funding Oregon's Coastal Nonpoint Pollution Control Program.

On Jan. 6, 2009, the NWEA filed suit against NOAA and the EPA for, among other things: (1) not having the authority to conditionally approve Oregon's program and (2) failing to penalize Oregon for not developing an approved program by withholding funding under Section 306 of the Coastal Zone Management Act and Section 319 of the Clean Water Act. The CZMA is the enabling statute that encourages the protection, development, restoration, and enhancement of natural coastal resources, while the Coastal Zone Reauthorization Act reauthorizes the CZMA and adds a new requirement for states that have approved coastal-zone management programs to develop and implement coastal nonpoint control programs (CNPs).

The parties to the suit reached a settlement and submitted a joint motion to dismiss and agreed order on Sept. 28, 2010. The motion adopted stipulations by the parties whereby NOAA and the EPA would either completely deny or completely approve of the Oregon Coastal NPS Program by Nov. 15, 2013. The judge adopted the agreed order dismissing the federal Administrative Procedures Act (APA) claims without prejudice on Sept. 28, 2010. The court continues to retain jurisdiction for the purpose of enforcing the terms of the agreed order.

Impact on the TCEQ: As a result of this lawsuit, the court could force NOAA and the EPA to formally disapprove Oregon's program and administer penalties. This lawsuit may affect the other 12 states with conditional approvals, including Texas. The court could also require NOAA and the EPA to undergo formal consultation on the Endangered Species Act for Oregon's CNP, which would set a precedent for all 34 other states with CNPs, including Texas.

In re Voda Petroleum State Superfund Site Litigation No. D-1-GN-10-000772; 345th Dist. Ct., Travis County, Tex.

Case Summary: *In re Voda Petroleum State Superfund Site Litigation*—formerly *Young Chevrolet, Inc. v. TCEQ*, pertaining to the Voda Petroleum, Inc.,

State Superfund Site—was filed by potentially responsible parties (plaintiffs) to appeal an administrative order issued by the TCEQ pursuant to the Texas Superfund law (THSC 361, subchapters F and I).

Relative to issues relating to liability and apportionment decided by the supreme court in *Burlington Northern and Santa Fe Railway Co. v. United States* (556 U.S. 599 [2009]), the plaintiffs demanded that the TCEQ prove that the plaintiffs are liable for remediation and/or associated costs. The plaintiffs asserted the defense of no intent to dispose. The plaintiffs specifically denied liability for remedial actions or costs associated with specific areas of the Superfund site and for certain materials disposed of at the site. The plaintiffs also denied responsibility for orphan shares. The plaintiffs contended that the wastes were divisible and sought apportionment and denied that they were jointly and severally liable.

On July 30, 2012, the TCEQ and a significant majority of the plaintiffs presented to the court an Agreed Final Judgment (AFJ). Attached to the AFJ was the settlement agreement between the State of Texas and the United States of America for claims relating to the site, which was executed on July 2, 2012. Together, the AFJ and the settlement agreement resolve the TCEQ's claims against certain plaintiffs, including federal entities, regarding the site.

The TCEQ filed a Motion for Revised Discovery Control Plan on Dec. 18, 2013, in the ongoing cost-recovery case against certain parties after the Texas Supreme Court's decision in *Texas Commission on Environmental Quality v. City of Waco* (143 S.W.3d 409 [Tex. 2013]) arguing that review of a TCEQ administrative order is based on substantial evidence, and therefore, discovery is limited to the administrative record. The TCEQ also filed on this date a Motion to Dismiss Certain Claims to dismiss opposing parties' declaratory judgment claims and to dismiss all claims against the TCEQ commissioners, who were sued individually.

Impact on the TCEQ: A favorable ruling for the plaintiffs with respect to one or more of the above issues has the potential to create future challenges for recovery of state Superfund costs.

In re Oil Spill by the Oil Rig Deepwater Horizon in the Gulf of Mexico, on April 20, 2010

MDL No. 2179; U.S. Dist. Ct., E.D. La. (77 cases combined into this one case on Aug. 10, 2010)

Case Summary: Seventy-seven cases related to the Deepwater Horizon oil spill were combined by the U.S. District Court in the Eastern District of Louisiana. A portion of the cases combined in this court include private causes of action for lost revenue resulting from the spill by fisherman and other local business owners. The United States and the states of Louisiana and Alabama also filed causes of action for federal civil penalties under the Clean Water Act and state civil penalties under applicable state laws. All of these cases were combined into this one case.

On May 17, 2013, the State of Texas joined the MDL (multi-district litigation), filing causes of action for economic damages, natural resource damages, declaratory judgment, penalties and costs. In addition to over 500 private parties, the United States and all five Gulf Coast states—Texas, Louisiana, Mississippi, Alabama, and Florida—are now plaintiffs in the MDL. Defendants include BP, Transocean, Halliburton, and Anadarko. This litigation is being conducted in phases, as follows:

- Phase One of the trial took place during February and March of 2013. It addressed issues of liability and gross negligence. The court has not yet issued a ruling.
- Phase Two of the trial took place in the fall of 2013. It addressed issues of source control (i.e., efforts to collect, control, or halt the flow of hydrocarbons) and quantification (i.e., the amount of oil actually released into the Gulf of Mexico as a result of the incident). The court has not yet issued a ruling.
- Phase Three (the “Penalty Phase”) will address civil penalty claims brought by the United States under the Oil Pollution Act (OPA). It is not yet known on what date this phase will begin.
- Phase Four will address the natural resource damage assessment. It is not yet known on what date this phase will begin. The TCEQ is one of three Texas state agencies (along with the Texas

Parks and Wildlife Department and the General Land Office) delegated by the governor to serve as a trustee in Natural Resource Damage matters for Texas. The Texas Natural Resource Trustees are currently working jointly with the Natural Resource Trustee representatives from the other four Gulf Coast states as well as with the federal Natural Resource Trustee representatives from the National Oceanic and Atmospheric Administration, the Department of the Interior, the U.S. EPA, and the USDA (collectively, the Trustees) in the Natural Resource Damage case related to the Deepwater Horizon oil spill. The Texas Trustees, including the TCEQ, may recover the determined amount of damages to natural resources and replace or restore the lost resources on behalf of the public in accordance with the Oil Pollution Act.

Impact on the TCEQ: Texas’ claims for economic damages, natural resource damages, and penalties have the potential for significant recovery. Claims directly pertaining to the TCEQ are the natural resource damage claims and the claims related to violations of the Texas Water Code.

Aransas Project v. Bryan Shaw et al.

U.S. Dist. Ct., S.D. Tex., Corpus Christi Div.; Civil Action No. C-2:10-cv-00075

Case Summary: On March 10, 2010, the Aransas Project (TAP) sued the TCEQ commissioners and executive director and the South Texas Watermaster for a “taking” under the federal Endangered Species Act because they allegedly failed to properly allocate water rights in the Guadalupe River Basin to guarantee sufficient freshwater inflows into San Antonio Bay during periods of drought. In part, TAP requests that the water rights in the basin be reallocated to help the whooping crane, or that a habitat conservation plan (HCP) be required. The Guadalupe Basin River Authority, the San Antonio River Authority, and the Texas Chemical Council intervened. The TCEQ responded that it had not caused a taking and asserted a number of affirmative defenses, including

that the plaintiff's claims are barred by sovereign immunity and that the TCEQ has no authority to address the plaintiff's complaint of injury.

Trial was held in December 2011. The judge ordered the TCEQ to not issue any permits in the Guadalupe or San Antonio rivers until the judge is satisfied that the TCEQ is protecting the whooping crane. The judge also ordered the TCEQ to prepare a habitat conservation plan for and obtain an incidental-take permit from the U.S. Fish and Wildlife Service. The judge ruled in favor of the plaintiff and against the TCEQ. The state appealed the case to the 5th Circuit Court of Appeals. The court of appeals issued an emergency stay and heard oral arguments on Aug. 8, 2013.

Impact on the TCEQ: If the court of appeals rules against the TCEQ, then the TCEQ could not issue any water-rights permits in the Guadalupe or San Antonio rivers until it obtains an incidental-take permit from the U.S. Fish and Wildlife Service.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; and Barry Smitherman, Chairman of the Texas Public Utility Commission v. U.S. Environmental Protection Agency U.S. Court of Appeals, D.C. Cir., Case No. 10-1041

Case Summary: Texas is challenging the EPA's Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act (Endangerment Finding). Texas argues: (1) the EPA exceeded its statutory authority, abused its discretion, and acted arbitrarily and capriciously by violating the Clean Air Act section 307(d), the Administrative Procedures Act, the "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the EPA," and other applicable law; (2) the EPA exceeded its statutory authority, abused its discretion, and acted arbitrarily and capriciously in violation of the Clean Air Act, Section 307(d), by re-delegating its statutory responsibilities to perform an endangerment analysis to a foreign entity, the Intergovernmental Panel on Climate Change (IPCC), and other organizations, and

relying upon "assessments" from this foreign entity and other organizations; and (3) the EPA's Endangerment Finding, together with the text of Clean Air Act section 202(a), demonstrate that the outer limits of the non-delegation precedents of the supreme court have been exceeded, violating the separation of powers principle under the U.S. Constitution, rendering the Endangerment Finding unlawful.

Impact on the TCEQ: EPA actions have required states to conduct greenhouse gas (GHG) permitting. However, the TCEQ has informed the EPA that the TCEQ does not have the authority or intention of regulating GHGs. This has resulted in a SIP (state implementation plan) Call and a FIP (federal implementation plan) for the EPA to issue the permits. Therefore, the EPA is the permitting authority for GHGs in Texas, pending resolution of these challenges. In June 2012, a three-judge panel upheld the Endangerment Finding, Tailpipe Rule, Timing Rule, and Tailoring Rule. The D.C. Circuit denied motions for rehearing with two judges dissenting, on Dec. 20, 2012.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commission; Texas Railroad Commission; Texas General Land Office; State of Alabama; State of South Carolina; State of South Dakota; Commonwealth of Virginia; and Haley Barbour, Governor of the State of Mississippi v. U.S. Environmental Protection Agency U.S. Court of Appeals, D.C. Cir., Case No. 10-1128

Case Summary: Texas is challenging the EPA's "Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs, Final Rule" (Johnson Memo or Timing Rule). Texas' Statement of Issues: (1) Whether pollutants for which there are no NAAQS can become "subject to regulation" for purposes of triggering permitting requirements under the PSD program; (2) Whether the PSD program is applicable to pollutants that are generally uniform in concentration throughout the atmosphere and defy area-specific effects; (3) Whether the act requires a SIP Call to

accord states an appropriate process by which to conform their plans to the PSD Interpretive Rule; (4) Whether the act allows the regulation of an air pollutant under Title II to automatically trigger its regulation under the PSD program; (5) Whether it is arbitrary and capricious for the EPA to adopt an interpretation of the act that causes absurd results; (6) With respect to regulation of GHG from stationary sources, the EPA's interpretive rule exceeds its statutory authority or is arbitrary, capricious, or an abuse of EPA discretion by relying on the Endangerment Finding that (a) violates the act, the APA, EPA guidelines, and other applicable law; and (b) was improperly delegated responsibility to perform an endangerment analysis to a foreign entity, the IPCC among other organizations; and (7) Whether the interpretive rule together with the Endangerment Finding exceeds the limits of the supreme court's non-delegation precedents, violating the separation of powers principle under the U.S. Constitution.

Impact on the TCEQ: EPA actions have required states to conduct GHG permitting. However, the TCEQ has informed the EPA that the TCEQ does not have the authority or intention of regulating GHGs. This has resulted in a SIP Call and a FIP for the EPA to issue the permits. Therefore, the EPA is the permitting authority for GHGs in Texas, pending resolution of these challenges. In June 2012, a three-judge panel upheld the Endangerment Finding, Tailpipe Rule, Timing Rule, and Tailoring Rule. The D.C. Circuit denied motions for rehearing with two judges dissenting, on Dec. 20, 2012.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commission; Texas Railroad Commission; Texas General Land Office; State of Alabama; State of South Carolina; State of South Dakota; Commonwealth of Virginia; Haley Barbour, Governor of the State of Mississippi v. U.S. Environmental Protection Agency U.S. Court of Appeals, D.C. Cir., Case No. 10-1182

Case Summary: Texas is challenging the EPA's final "Light-Duty Vehicle Greenhouse Gas Emission

Standards and Corporate Average Fuel Economy Standards" (Tailpipe Rule). Statement of Issues: (1) Whether it is arbitrary and capricious for the EPA to promulgate the Tailpipe Rule without considering the economic impacts that result from the rule's triggering of the Prevention of Significant Deterioration ("PSD") program for greenhouse gases (GHGs); (2) Whether the EPA acts contrary to Section 202(a)(2) of the CAA by allowing the Tailpipe Rule to take effect before GHG control technologies for PSD sources are developed and applied; (3) Whether it is arbitrary and capricious for the EPA to adopt a rule that causes absurd results; (4) Whether, with respect to the regulation of GHGs from stationary sources, the EPA's Tailpipe Rule exceeds the EPA's statutory authority or is arbitrary, capricious, or an abuse of the EPA's discretion by relying on the EPA's "Endangerment Finding" that violates CAA section 307(d), the Administrative Procedures Act, the "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information disseminated by EPA," and other applicable law; (5) Whether, with respect to regulation of GHGs from stationary sources, the EPA's Tailpipe Rule exceeds the EPA's statutory authority or is arbitrary, capricious, or an abuse of the EPA's discretion in violation of CAA, Section 307(d), by relying on the EPA's "Endangerment Finding" in which it improperly re-delegated its statutory responsibility to perform an endangerment analysis to a foreign entity, the Intergovernmental Panel on Climate Change (IPCC), among other organizations; and (6) Whether the EPA's Tailpipe Rule, together with CAA, Section 202(a), the EPA's "Endangerment Finding," and the EPA's "PSD Interpretive Rule," exceeds the limits of the supreme court's non-delegation precedents, violating the separation of powers principle under the U.S. Constitution.

Impact on the TCEQ: EPA actions have required states to conduct GHG permitting. However, the TCEQ has informed the EPA that the TCEQ does not have the authority or intention of regulating GHGs. This has resulted in a SIP-call and a FIP for the EPA to issue the permits. Therefore, the EPA is the permitting

authority for GHGs in Texas pending resolution of these challenges. In June 2012, a three-judge panel upheld the Endangerment Finding, Tailpipe Rule, Timing Rule, and Tailoring Rule. The D.C. Circuit denied motions for rehearing with two judges dissenting, on Dec. 20, 2012.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commission; Texas Railroad Commission; and Texas General Land Office v. U.S. Environmental Protection Agency

U.S. Court of Appeals, D.C. Cir., Case No. 10-1222

Case Summary: Texas is challenging the EPA's PSD and Title V GHG Tailoring Rule (Tailoring Rule). Statement of the Issues: (1) Whether the EPA's decision to rewrite specific emission rates in the Clean Air Act's text for PSD and Title V applicability is arbitrary and capricious or contrary to law; (2) Whether the EPA's decision to require the State of Texas to reinterpret or revise its State Implementation Plan to conform to the Tailoring Rule without adequate notice and in a timeframe that contravenes the EPA's existing Part 51 regulations is arbitrary and capricious or contrary to law; and (3) Whether the EPA may rely on the absurd results and purported administrative necessity or "one step at a time" doctrines to promulgate a rule where the EPA itself created the absurd results in question through its unlawful interpretation of the Clean Air Act.

Impact on the TCEQ: EPA actions have required states to conduct GHG permitting. However, the TCEQ has informed the EPA that the TCEQ does not have the authority or intention of regulating GHGs. This has resulted in a SIP Call and a FIP for the EPA to issue the permits. Therefore, the EPA is the permitting authority for GHGs in Texas, pending resolution of these challenges. In June 2012, a three-judge panel upheld the Endangerment Finding, Tailpipe Rule, Timing Rule, and Tailoring Rule. The D.C. Circuit denied motions for rehearing with two judges dissenting, on Dec. 20, 2012.

State of Texas et al. v.

U.S. Environmental Protection Agency

U.S. Sup. Ct., Case No. 12-1269 (consolidated with Nos. 12-1146, 12-1248, 12-1254, 12-1268, 12-1272)

Case Summary: On petitions for writ of certiorari (asking the Supreme Court to review the lower court's ruling), the court granted review on the following question: whether the EPA's regulation of motor-vehicle emissions also triggers new permitting requirements for stationary sources.

Impact on the TCEQ: The EPA's actions require states to implement PSD and Title V permitting of major GHG stationary sources. Texas is currently under a FIP, with the EPA as the permitting authority for GHGs in Texas. HB 788, passed by the 83rd Legislature, requires the TCEQ to conduct rulemaking in order to remove the FIP and obtain authority to issue GHG permits in Texas through EPA approval of its rules into the SIP. According to HB 788, if the supreme court rules in favor of the petitioner states such that federal permitting of GHGs from stationary sources is no longer required, the TCEQ would repeal its GHG permitting rules and submit a SIP revision to the EPA withdrawing those rules from the state plan.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commissioners Smitherman, Nelson, and Anderson; Texas Railroad Commission; and Texas General Land Office v. U.S. Environmental Protection Agency

U.S. Court of Appeals, 5th Cir., Case No. 10-60961

Case Summary: Texas is challenging the EPA's "Action to Ensure Authority to Issue Permits under the PSD Program to Sources of GHGs: Finding of Substantial Inadequacy and SIP Call (GHG SIP Call)" that was final Dec. 13, 2010. The petition is based on the following: the action is contrary to the CAA and the constitution, and it is arbitrary and capricious.

Impact on the TCEQ: The EPA's actions require states to implement PSD and Title V permitting of major GHG stationary sources. Texas is currently under a FIP, with the EPA as the permitting authority

for GHGs in Texas. HB 788, passed by the 83rd Legislature, requires the TCEQ to conduct rulemaking in order to remove the FIP and obtain authority to issue GHG permits in Texas through EPA approval of its rules into the SIP. According to HB 788, if the supreme court rules in favor of the petitioner states such that federal permitting of GHGs from stationary sources is no longer required, the TCEQ would repeal its GHG permitting rules and submit a SIP revision to the EPA withdrawing those rules from the state plan.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commissioners Smitherman, Nelson, and Anderson; Texas Railroad Commission; and Texas General Land Office v. U.S. Environmental Protection Agency
U.S. Court of Appeals, D.C. Cir., Case No. 10-1425

Case Summary: Texas is challenging the EPA’s “Determination Concerning Need for Error Correction, Partial Approval and Partial Disapproval, and FIP Regarding Texas PSD Program (Partial SIP Disapproval/GHG FIP), Interim Final Rule” that was final and effective Dec. 30, 2010. The petition is based on the following: the action is contrary to both the CAA and fundamental principles of administrative law, and is arbitrary and capricious and contrary to law.

Impact on the TCEQ: The EPA’s actions require states to implement PSD and Title V permitting of major GHG stationary sources. Texas is currently under a FIP, with the EPA as the permitting authority for GHGs in Texas. HB 788, passed by the 83rd Legislature, requires the TCEQ to conduct rulemaking in order to remove the FIP and obtain authority to issue GHG permits in Texas through EPA approval of its rules into the SIP. According to HB 788, if the supreme court rules in favor of the petitioner states such that federal permitting of GHGs from stationary sources is no longer required, the TCEQ would repeal its GHG permitting rules and submit a SIP revision to the EPA withdrawing those rules from the state plan.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commissioners Smitherman, Nelson, and Anderson; Texas Railroad Commission; and Texas General Land Office v. U.S. Environmental Protection Agency

U.S. Court of Appeals, D.C. Cir., Case No. 11-1128

Case Summary: Texas is challenging the EPA’s “Determination Concerning Need for Error Correction, Partial Approval and Partial Disapproval, and FIP Regarding Texas PSD Program (Partial SIP Disapproval/GHG FIP), Final Rule” that was final and effective May 1, 2011. The petition is based on the following: the action is contrary to both the CAA and fundamental principles of administrative law, and is arbitrary and capricious and contrary to law.

Impact on the TCEQ: The EPA’s actions require states to implement PSD and Title V permitting of major GHG stationary sources. Texas is currently under a FIP, with the EPA as the permitting authority for GHGs in Texas. HB 788, passed by the 83rd Legislature, requires the TCEQ to conduct rulemaking in order to remove the FIP and obtain authority to issue GHG permits in Texas through EPA approval of its rules into the SIP. According to HB 788, if the supreme court rules in favor of the petitioner states such that federal permitting of GHGs from stationary sources is no longer required, the TCEQ would repeal its GHG permitting rules and submit a SIP revision to the EPA withdrawing those rules from the state plan.

Luminant Generation Co., LLC, et al. v. U.S. Environmental Protection Agency

U.S. Court of Appeals, 5th Cir., Case No. 10-60891

Case Summary: This challenges the EPA’s final disapproval on Sept. 15, 2010, of the TCEQ’s rules regarding changes adopted (a) in 2005 to implement the 1997 8-hour Ozone Standard adopted in 2005, and (b) in 2006 to implement the EPA’s New Source Review (NSR) Reform Rules (which included changes to a Pollution Control Project Standard Permit [PCP SP] Rule). The EPA disapproved the rules when it found that they do not meet the requirements of the Clean

Air Act and the EPA's regulations, based on the following grounds: (1) the plant-wide applicability limit (PAL) rules do not include text necessary for approval as a SIP revision, (2) certain other rules do not meet the requirements for approval as major NSR non-PAL SIP revision, and (3) the standard permit rule is not approvable as a minor NSR SIP revision. The focus of the state challenge is the EPA's disapproval of the Pollution Control Project Standard Permit.

Impact on the TCEQ: Only the disapproval of the PCP SP rule is the subject of this litigation. The TCEQ amended the PCP SP rule and adopted a new non-rule PCP SP. This case was held in abeyance pending the resolution of the previous case; the abeyance has been lifted; the EPA has until June 4, 2012, to file the administrative record. The impact of the decision will be the degree to which the court agrees or disagrees with the state's argument regarding the EPA's failure to correctly interpret and apply federal law, both the Clean Air Act and the EPA's regulations.

**Luminant Generation Co., LLC, et al. v.
U.S. Environmental Protection Agency**

U.S. Court of Appeals, 5th Cir., Case No. 11-60158

Case Summary: Texas is challenging the EPA's final rule published in the *Federal Register* at 76 Fed. Reg. 1525 (Jan. 11, 2011) and titled "Approval and Promulgation of Air Quality Implementation Plans; Texas; Revisions to Rules and Regulations for Control of Air Pollution; Permitting of Grandfathered and Electing Electric Generating Facilities." The EPA approved all revisions of the Texas State Implementation Plan (SIP) submitted by the TCEQ on Jan. 3, 2000, and July 31, 2002, as supplemented on Aug. 5, 2009, except 30 TAC 116.911(a)(2), which allows use of a Pollution Control Project Standard Permit. These revisions are to regulations of the TCEQ that relate to application and permitting procedures for grandfathered electric generating facilities (EGFs), implementing Senate Bill 7 to achieve nitrogen oxide (NO_x), sulfur dioxide (SO₂), and particulate matter (PM) emission reductions from grandfathered EGFs.

Impact on the TCEQ: This litigation concerns the disapproval of only one rule, which refers to the PCP SP rule (see case immediately above for more information).

**Luminant Generation Company et al. v.
U.S. Environmental Protection Agency**

U.S. Court of Appeals, 5th Cir., Case No. 10-60934

Case Summary: Texas is not a party to this case, which challenges the EPA's action on Nov. 10, 2010, regarding the TCEQ's Emissions Events Rules, which were adopted in December 2005 (effective January 2006). Instead, Texas filed an amicus brief (a) in support of the EPA's approval of emissions events rules regarding reporting requirements, and affirmative defense for excess emissions from emissions events and unplanned maintenance, startup, and shutdown (MSS) activities, and (b) in opposition of the EPA's disapproval of the rules that provide an affirmative defense for planned MSS activities.

Impact on the TCEQ: If the court upholds the EPA's approval of the rules that allow an affirmative defense and waiver of penalties for certain excess emissions violations, petitioners opposed to the approval may seek to appeal the decision, which would delay resolution of the controversy. This is because the issue of penalty waiver is a national issue. If the court disapproves the EPA's approval of the affirmative defense rules, the commission will need to conduct rulemaking and likely seek conforming statutory changes. With regard to the remaining petition regarding disapproval of a phased affirmative defense for planned MSS, little impact is expected since most industry groups have already sought authorization of their planned MSS.

**EME Homer City Generation, L.P. v.
U.S. Environmental Protection Agency
U.S. Court of Appeals, D.C. Cir.**

Case Summary: Texas is challenging the EPA's Cross State Air Pollution Rule (CSAPR), which the EPA is using to replace CAIR, which was partially remanded, and partially vacated, by the D.C. Circuit.

The rule is also being challenged by Texas electric generating utilities, including Luminant and San Miguel, and Pennsylvania’s EME Homer City Generation LP. It is possible that other states, and other EGUs, will also be challenging this rule.

Texas’ arguments: The EPA impermissibly included Texas in the final CSAPR for PM_{2.5}, after not including Texas in the proposed rule; therefore, Texas was deprived of its legal opportunity to comment on its inclusion in the final rule. The lack of notice deprived Texas of the opportunity to comment on fatal flaws in the EPA’s modeling that shows Texas to be contributing to a monitor in Illinois that is both attaining the PM_{2.5} NAAQS and heavily locally influenced. The EPA failed to consider the impacts of the rule on electric reliability in Texas, and the rule will cause irreparable harm in Texas if it is not stayed. Texas is also challenging the rule based on the new inclusion of Texas for ozone maintenance to a monitor that was not included in the proposed rule. Texas is challenging the rule more broadly and asking for vacatur based on the many flaws in the rule, addressed in both our original comments and our two petitions to the EPA administrator.

Impact on the TCEQ: The TCEQ is currently administering the trading provisions of the Clean Air Interstate Rule (CAIR), which was reinstated by the D.C. Circuit during the pendency of the stay of CSAPR. Should the court vacate the rule and require CAIR to remain in place while the EPA writes a new rule, the TCEQ would continue to administer CAIR. Should CSAPR be upheld by the court, Texas would be included in a FIP for transport for both PM_{2.5} and ozone. The EPA would administer the trading programs under the FIP. If the rule is upheld as written, it is possible that it could lead to the shutdown of coal-fired power plants in Texas, with potential significant adverse impacts to the electric power grid. On Aug. 21, 2012, the D.C. Circuit vacated CSAPR in full in a 2-1 decision. On June 24, 2013, the supreme court granted certiorari. Oral arguments were heard by the supreme court on Dec. 10, 2013.

Edwards Aquifer Authority v. Bragg

___ S.W.3d ___, 2013 WL 5989430, Tex. App.—San Antonio, Nov. 13, 2013; No. 04-11-0018-cv

Case Summary: Commercial pecan growers filed action against the Edwards Aquifer Authority (EAA) for an alleged taking of growers’ property, and for alleged violations of growers’ federal civil rights, as result of decisions denying one water permit application and partially denying another. The lawsuit was removed to federal court, which dismissed the civil-rights claims and remanded the takings claims back to state court. The 38th Judicial District Court, Medina County, granted partial summary judgment on liability for the takings claim and, following a bench trial, awarded compensation. Both parties appealed.

The San Antonio Court of Appeals reversed the trial court and held that:

EAA is a proper party to a takings lawsuit instituted under the Edwards Aquifer Authority Act (EAAA), even though actions of EAA giving rise to suit may not have been discretionary, and even if the state might be a proper party; ten-year statute of limitations for an adverse possession claim applies where a regulatory taking results from an unreasonable interference with the landowner’s right to use and enjoy the property; EAA’s regulatory-takings claims did not accrue for limitations purposes until EAA made its final decisions regarding application of EAAA to growers’ permit applications; permitting system under EAAA that dictated the decisions on growers’ applications resulted in compensable “regulatory taking” of two orchards; proper time for determining the value of groundwater rights subjected to regulatory taking was the time at which the statutory provisions that dictated those decisions were applied to the properties in question; and just compensation would be determined by reference to the best and highest use of the two properties at issue, i.e., as commercial pecan orchards, and by valuing the orchards immediately before and immediately after the EAAA was applied to the orchards.

The court remanded the case for a proper determination of compensation.

Impact on the TCEQ: Although the TCEQ does not regulate groundwater, the holdings of this case could be argued to apply in other matters that are under the agency’s jurisdiction.

Texas Farm Bureau, Frank Volleman, and Frank Destefano v. Texas Commission on Environmental Quality

Cause No. D-1-GN-12-003937; 98th Dist. Ct., Travis County, Tex.

Case Summary: Section 11.053 of the Texas Water Code states that the TCEQ’s executive director (ED) has the authority to issue an order suspending or curtailing water rights in times of drought or emergency shortage of water based on a senior call. The ED issued an order, based on a senior call from Dow Chemical Company, suspending water rights in the Brazos River Basin that were junior to Dow Chemical Company. The commissioners affirmed the order with modifications. The ED and the commissioners did not suspend junior municipal or power-generation water rights because of health and welfare concerns about these suspensions.

The plaintiffs argue that the TCEQ exceeded its authority under Section 11.053, and contend that the TCEQ improperly gave itself the authority to modify the prior appropriation doctrine when it did not suspend the municipal and power-generation water rights. The trial court agreed with the Farm Bureau and struck the TCEQ’s rules in 30 TAC 36 that implement Section 11.053 of the Texas Water Code. The trial-court decision has been appealed to the 13th Court of Appeals.

Impact on the TCEQ: If affirmed, the trial court’s decision will result in the commissioners and executive director having no rules to implement Section 11.053 of the Texas Water Code. The ED would have to promulgate new rules. The ED would also have to suspend municipal and power-generation water rights based on senior calls.

Natural Resource Defense Council, Inc. v. County of Los Angeles

673 F.3d 880 (9th Cir. 2011); reversed sub nom., Los Angeles County Flood Control Dist. v. Natural Res. Def. Council, Inc., 133 S. Ct. 710 (U.S. Jan. 8, 2013); affirmed on rehearing, 725 F.3d 1194 (9th Cir. 2013)

Case Summary: The Natural Resource Defense Council (NRDC) and Santa Monica Baykeeper filed suit against the County of Los Angeles and the Los Angeles County Flood Control District, alleging that the entities are discharging polluted stormwater through municipal separate storm sewer systems (MS4s) in violation of the Clean Water Act (CWA). This was due to pollutant levels in the Los Angeles River, San Gabriel River, Santa Clara River, and Malibu Creek exceeding limits in the National Pollutant Discharge Elimination System (NPDES) permit that covers both the county’s and the district’s MS4. The district court granted a summary judgment in favor of the county and district, and the plaintiff appealed.

The appellate court found that the permit explicitly stated that one of the purposes of the district’s mass monitoring stations is to determine if “the MS4 is contributing to exceedances of Water Quality Standards” and that the district must comply with those standards. In other words, the district is responsible for stormwater discharges that violate its MS4 permit. Based on this conclusion, the appellate court ruled that the district court had erred in its analysis of the evidence with respect to the Los Angeles and San Gabriel rivers.

The court found sufficient evidence that the polluted stormwater passed through monitoring stations located within the MS4 owned by the district and that, even after the stations detected pollutant amounts that exceeded permit limits, the stormwater was discharged into those two rivers. Despite the district’s argument that it did not add the pollution to the stormwater, the court believed that the CWA does not distinguish between those who add and those who convey what is added by others. Therefore, the court ruled that the plaintiff was entitled to summary judgment with respect to the Los Angeles and San Gabriel rivers.

On the other hand, the court found that the plaintiff had not provided sufficient evidence of the district causing pollution in the other two rivers. The monitoring stations were located in the rivers themselves. Without further evidence, concluding that the MS4s contributed the detected pollution would merely be an assumption. The court also did not believe that the plaintiff had shown how the county had contributed to pollution in any of the water bodies. Therefore, the appellate court reversed the lower court in part, affirmed in part, and remanded the case.

The U.S. Supreme Court heard the case on appeal, but only on the question of whether water that flows from a river into a channel or other engineered improvement and then back into the same river is a discharge from an outfall under the CWA. The court ruled that such water is not a discharge, citing to its decision in *South Florida Water Management District v. Miccosukee Tribe*, 541 U.S. 95 (2004), in which the court determined that pumping polluted water from one part of a water body into another is not a discharge under the CWA. Therefore, the Court reversed the 9th Circuit's judgment and remanded the case.

On remand, the 9th Circuit again ruled in the plaintiff's favor. It took up the liability issue and determined that the permit required the district to use monitoring stations to characterize stormwater discharges *and* assess compliance with water quality standards. Looking at the permit language that stated that each permittee was responsible only for its own discharge, the court determined that applying this phrase to a permittee's liability would render the permit's monitoring language largely moot and held that the phrase applied to determining remedies when a violation has been detected, not to determining which individual permittees were liable.

The court also looked to the CWA and applicable rules, both of which require monitoring to determine permit compliance; the fact that the governing board that issued the permit rejected the defendants' arguments; and the fact that the defendants chose the location of the monitoring stations as representative of the monitored activity. Finding that the monitoring

data applied to all the defendants, the court held that the monitoring data showed that the defendants had violated the permit's pollution limits. It reversed and remanded the case to the district court for further proceedings, including determining the appropriate remedy in light of the defendants' violations. On Jan. 24, 2014, Los Angeles County filed a request with the U.S. Supreme Court asking that it take up the case again.

Impact on the TCEQ: This case provides further evidence that water moving from one part of a water body to another part of the same water body is not a discharge for purposes of the Clean Water Act. It also provides an example of how a court may hold all permittees under an MS4 permit liable for pollution-level violations even if a permittee's separate discharge has not been shown to be in violation of the permit's pollution levels.

Delaware Department of Natural Resources and Environmental Control v. U.S. Army Corps of Engineers 685 F.3d 259 (3rd Cir. 2012)

Case Summary: In 1992, in the Water Resources Development Act, the U.S. Congress authorized the U.S. Army Corps of Engineers (Corps) to deepen the Delaware River's main channel by five feet. The project was delayed until the fall of 2009, but Delaware and New Jersey then each filed a lawsuit in their respective district courts seeking to enjoin the Corps from dredging the channel, alleging violations of the National Environmental Policy Act (NEPA), the Clean Water Act (CWA), and the Coastal Zone Management Act (CZMA). Both courts granted summary judgment to the Corps, and both states appealed.

In its analysis of the states' arguments, the appellate court found no violation of NEPA. The Corps had published an environmental-impact statement (EIS) in 1992, a supplemental EIS (SEIS) in 1997, and an environmental assessment in 2009, the last of which reasonably concluded that the project could proceed without an additional SEIS. The court also found no violation of the CWA, as the exemption to state water certification and federal permitting in Section 404(r) and to state environmental law compliance in Section

404(t) of the CWA both applied in this case. The Corps had received Congressional approval of the project, and it had shown that the project was necessary to maintain navigation in the Delaware River. Finally, the court found that the Corps did not need to provide supplemental consistency determinations under the CZMA. Although new information had become available, the Corps' conclusion that there were no substantial changes to the project or significant new information was reasonable. Therefore, the court affirmed the lower courts' rulings.

Impact on the TCEQ: Under the 3rd Circuit's interpretation of the Section 404 exemptions, the Corps could bypass TCEQ approval of one of its projects if that project has been authorized by Congress and is necessary to maintain navigation in the water body in question. The court's interpretation also provides guidance regarding when a supplemental consistency determination is not needed under the CZMA.

National Mining Association v. Jackson
880 F. Supp. 2d 119 (D. D.C. 2012)

Case Summary: The plaintiff challenged an interim guidance document issued by the EPA regarding Appalachian surface coal mining. The EPA later issued its final guidance document, which the plaintiff challenged under the Surface Mining Control and Reclamation Act, the Clean Water Act (CWA), and the Administrative Procedure Act. Regarding the CWA, the plaintiff argued that the EPA was trying to establish requirements for setting water quality-based standards for Section 402 and 404 permits in the guidance document. The defendant argued that the final guidance was not a final agency action and, therefore, the court could not review it.

The court ruled that the final guidance was a final agency action, as it was a consummation of the EPA's decision-making process and the regional offices had applied the guidance in a manner that has changed the states' obligations under the CWA. The court also determined that the guidance was not subject to the federal courts of appeals' original jurisdiction under Section 509 of the CWA because it did not approve or

promulgate a Section 301 effluent limitation and did not issue or deny a Section 402 permit. Regarding the EPA's CWA authority, the court ruled that the EPA had overstepped its Section 303 authority by establishing a water quality-based limit in the guidance and its Section 402 authority by altering the states' reasonable potential analysis authority.

Impact on the TCEQ: This case demonstrates that the courts can decide that what the EPA designates as a guidance document is in fact a final agency action based on how the guidance document was derived and used by the EPA. It also expresses limits on what actions the EPA can take through a guidance document.

Upper Blackstone Water Pollution Abatement District v. U.S. Environmental Protection Agency
690 F.3d 9 (1st Cir. 2012); cert. denied,
133 S. Ct. 2382 (2013)

Case Summary: The district challenged the effluent limits established by the U.S. Environmental Protection Agency (EPA) in the district's National Pollutant Discharge Elimination System (NPDES) permit as being premature and without scientific basis. The district discharges into the Blackstone River, which eventually turns into the Seekong River, flows into the Providence River, and then flows into Narragansett Bay. The water bodies suffer from cultural eutrophication issues due to high nitrogen and phosphorus levels, of which wastewater treatment plants are the main contributors.

The EPA issued a permit with aluminum, nitrogen, and phosphorus limits, and the district appealed to the Environmental Appeals Board. The board ruled in the EPA's favor, and the district appealed to the 1st Circuit. It objected to the permit's aluminum, nitrogen, and phosphorus limits and argued that the EPA should have delayed issuing the permit until the district had finished upgrading its facility and until a new computer model of the Blackstone River had been completed.

The court found that the EPA did not have to wait for the plant upgrades or new computer model before issuing the permit. The 2002 consent decree under

which the district was completing its upgrades and the possible new computer model did not alter the EPA's responsibility to reissue the district's permit every five years. Also, the EPA had determined that the limits in the new permit were necessary to meet water quality standards, and it did not believe a new computer model was likely to change that fact.

The court found that the EPA's determination was entitled to deference. Furthermore, the district has the opportunity in the future to submit new data and request a permit modification based on it. The court also affirmed the permit nutrient limits. The court found the EPA's use of certain models and studies to be rational and the nitrogen and phosphorus limits to be within the zone of reasonableness. The court also concluded that the district had waived its arguments against the aluminum limit by not raising its arguments during the public comment period. For these reasons, the court upheld the permit.

Impact on the TCEQ: This case demonstrates the level of deference a court may give a permitting agency when setting numeric effluent limits in an NPDES (or, in the case of Texas, a TPDES) permit. It also shows that a permitting agency does not need to delay issuing an NPDES permit because the facts or circumstances surrounding the permit may change in the future.

Friends of the Everglades v.

U.S. Environmental Protection Agency

699 F.3d 1280 (11th Cir. 2012); cert. denied, 134 S. Ct. 421 (2013); cert. denied sub nom., *U.S. Sugar Corp. v. Friends of the Everglades*, 134 S. Ct. 422 (2013); cert. denied sub nom., *S. Fla. Water Mgmt. Dist. v. Friends of the Everglades*, 134 S. Ct. 422 (2013)

Case Summary: The issue was whether the 11th Circuit Court of Appeals had original jurisdiction to hear consolidated challenges to the EPA's Water Transfer Rule under the Clean Water Act (CWA). A three-judge panel for the 11th Circuit ruled that the plain language of 33 USC 1369(b)(1) prevented it from exercising original jurisdiction over the challenges. The court reasoned that the exemption from NPDES permitting requirements created by the Water Transfer

Rule was not: (1) the promulgation of an effluent limitation or other limitation under CWA 302, 306, or 405, or (2) the issuance or denial of a permit under CWA 402; and, therefore, the U.S. Circuit Courts of Appeals lacked original jurisdiction under 33 USC 1369(b)(1)(E) and (b)(1)(F). The court also refused to exercise hypothetical jurisdiction over the challenges.

On Jan. 23, 2013, the EPA petitioned the court for an en banc rehearing. The next day, United States Sugar Corp. filed a petition to intervene on the EPA's side. Petitions for certiorari were filed on June 27 and 28, 2013, and denied on Oct. 15, 2013.

Impact on the TCEQ: If the 11th Circuit's decision stands, then challenges to the EPA's Water Transfer Rule would proceed in district courts in the Southern District of Florida and the Southern District of New York. The TCEQ will monitor these challenges to assess the potential impact of this issue on TPDES permitting.

Virginia Department of Transportation v.

U.S. Environmental Protection Agency

2013 WL 53741 (E.D. Va. Jan. 3, 2013)

Case Summary: The EPA established total maximum daily loads (TMDLs) for Accotink Creek in Virginia after the State of Virginia failed to do so. The EPA chose to set a TMDL for stormwater, which limited the flow to the creek to 681.8 cu ft/acre-day, to control the amount of sediment entering the creek. The EPA agreed that stormwater was not a pollutant but that it served as a surrogate for sediment, as the EPA believed that stormwater was the main contributor of sediment to the creek. The issue before the court on the plaintiff's motion for judgment on the pleadings was whether the Clean Water Act (CWA) authorizes the EPA to regulate the level of a pollutant by establishing a TMDL for the flow of a nonpollutant. Using step one of the *Chevron* test, the court considered whether the CWA was ambiguous on this issue.

The court found that the CWA clearly states that the EPA can set TMDLs for pollutants, not nonpollutants. The court rejected various arguments, including the EPA's argument that its regulations allow it to set

TMDLs as it sees fit. The court countered that to the extent that the EPA's regulations allow it to set TMDLs for nonpollutants, the regulations exceed the EPA's authority under the CWA. Therefore, the court found the EPA's interpretation of the statutes to be impermissibly broad and granted the plaintiff's motion.

On March 5, 2013, the EPA announced that it would not appeal the court's ruling.

Impact on the TCEQ: Delegated states, such as Texas, that have resisted the EPA's charge to use "surrogates" can cite this case as the authority not to do so. With this case, the EPA may no longer compel states to use nonpollutants as surrogates for pollutants. Since 2002, the EPA has pushed the idea of using nonpollutant surrogates such as impervious cover and stormwater to regulate pollutants such as sediments. The EPA issued a memorandum that included how to use surrogates as a TMDL and permitting parameter in 2002. The EPA expected delegated states to comply with the memorandum.

In November 2010, the EPA revised the memorandum ("Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs"). In the memorandum, the EPA endorsed "using surrogates for pollutant parameters when establishing targets for TMDL loading capacity." The EPA stated in the memorandum that "[w]here the WLA of a TMDL is expressed in terms of a surrogate pollutant parameter, then the corresponding permit can generally use the surrogate pollutant parameter in the WQBEL as well. Where the TMDL includes WLAs for stormwater sources that provide numeric pollutant load or numeric surrogate pollutant parameter objectives, the WLA should, where feasible, be translated into numeric WQBELs in the applicable stormwater permits."

**Greater Yellowstone Coalition v.
U.S. Environmental Protection Agency**

2013 WL 1760286 (D. Idaho Apr. 24, 2013)

Case Summary: The EPA approved antidegradation rules from the Idaho Department of Environmental

Quality (IDEQ) that included a definition of "degradation" and established a mandatory exemption for de minimis levels of discharge. The Greater Yellowstone Coalition challenged both rules, arguing that the rules defined "degradation" as a discharge affecting water use, not water quality, and that the de minimis rule allowed too much pollution. Regarding the de minimis rule, the coalition believed that the EPA had not considered the cumulative effects of de minimis discharges, only considering the impact of individual discharges. The EPA asked the court to remand this issue to the EPA for further consideration, and the court did so. For the definition, the EPA had relied on the IDEQ's reassurance in its response to comment for the rulemaking that the definition did in fact apply to the degradation of water quality, not of use.

The court looked to past cases and determined that the EPA's reliance on the IDEQ's explanation was appropriate only if the rules were ambiguous when looked at as a whole. While the court believed that the definition of degradation clearly applied to use rather than water quality, the rules regarding what the IDEQ would evaluate to determine if degradation had occurred and how to measure degradation applied to water quality, not use. Therefore, the court concluded that the antidegradation rules were ambiguous, and that it was appropriate for the EPA to have relied on the IDEQ's explanation of "degradation," thereby upholding the definition.

Impact on the TCEQ: The de minimis rule remanded in this case should be of interest to the TCEQ. TCEQ rule defines degradation as "a lowering of water quality by more than a de minimis extent, but not to the extent that an existing use is impaired." To the extent that the agency performs antidegradation review on a permit-by-permit basis, we need to watch what the EPA does on remand and monitor any subsequent litigation of the de minimis rule. This case also provides an example of how a court may analyze the EPA's reliance on a state agency's response to comment for a rulemaking and demonstrates the importance of clarity when engaging in rulemaking.

**American Farm Bureau Federation v.
U.S. Environmental Protection Agency
2013 WL 5177530 (M.D. Pa. Sept. 13, 2013)**

Case Summary: In a collaborative effort with the affected states, the EPA issued the Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus, and Sediment (Bay TMDL). The plaintiff sued, asking the court to vacate the Bay TMDL because the EPA did not have the authority to issue the Bay TMDL, the Bay TMDL was arbitrary and capricious and ultra vires, and notice was insufficient. The plaintiff filed a motion for summary judgment, and the EPA and other defendants filed cross-motions for summary judgment.

In its motion, the EPA challenged the plaintiff's standing. The court rejected the EPA's arguments, finding that the plaintiff did not have to establish standing in its opening brief and that the EPA had an opportunity to respond to the plaintiff's standing declarations when they were made. Also, it was clear that the plaintiff was the object of the Bay TMDL and would incur economic injuries by complying with it.

In its motion, the plaintiff argued that the EPA cannot implement the Bay TMDL because it is an impediment to the states' right to implement TMDLs as they see fit. The court found that states are primarily, although not exclusively, responsible for implementing TMDLs, but that the Bay TMDL was not an unlawful implementation plan.

While the EPA is not authorized under Section 303(e) of the Clean Water Act (CWA) to establish or take over TMDL implementation plans, the court found that the EPA's interpretation of a TMDL as a sum of wasteload allocations (WLAs) and load allocations (LAs) was reasonable, that the individual allocations mainly came from the states through the CWA's cooperative federalism scheme, that the EPA

had authority under the CWA to substitute its own allocations where necessary, that the reasonable-assurances requirement for establishing allocations was practical and based in the CWA, that the allocations were not locked in because states have the ability to change them, and that the EPA's holistic approach was consistent with the CWA and practical based on the circumstances. The court concluded that the Bay TMDL is not an implementation plan.

The plaintiff also argued that the 45-day comment period was insufficient and that certain models used in developing the Bay TMDL were not available during the comment period. The court rejected these arguments, finding that the Administrative Procedures Act (APA) only requires a 30-day comment period, and that the plaintiff had not shown how it was prejudiced by receiving what it believed was insufficient modeling information. The plaintiff's final argument was that the EPA relied on flawed modeling. The court found that the EPA had used the modeling in conjunction with local factors when establishing local allocations and had justified its use of the data that the plaintiff had taken issue with.

Finding that the framework used to establish the Bay TMDL was consistent with the CWA and the APA, the court granted the defendants' cross-motions for summary judgment and denied the plaintiff's motion for summary judgment.

Impact on the TCEQ: The EPA has the ability to establish a TMDL when a state has failed to do so, including allocating waste loads between point and nonpoint sources and again between categories of nonpoint sources and specific point sources, but it does not have the ability to develop a TMDL implementation plan or dictate to the state exactly how to implement the TMDL.

TCEQ STRATEGIC PLAN
FISCAL YEARS 2015-2019



Part III

Current Activities and Opportunities for Improvement

AIR QUALITY ISSUES 91

WATER QUALITY AND QUANTITY ISSUES 103

WASTE ISSUES 117

OTHER KEY ISSUES 124

Air Quality Issues

The TCEQ develops measures to control air pollution and meet the requirements of the federal Clean Air Act (CAA). These efforts include a thorough stakeholder process that involves citizens and local, state, and federal entities. If the state fails to submit and implement a federally approvable state implementation plan (SIP), the U.S. Environmental Protection Agency (EPA) could apply sanctions, including emissions offsets for new or modified stationary sources and a disruption of federal highway funding. The EPA could also implement a federal implementation plan that could contain federally initiated control measures.

National Ambient Air Quality Standards (NAAQS)

Since the early 1970s, the EPA has promulgated six national ambient air quality standards (NAAQS). The NAAQS were established to protect the public from exposure to harmful amounts of the following air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, respirable particulate matter, and sulfur dioxide. The CAA requires the EPA to review each criteria pollutant every five years to determine if the health-based standard is sufficient to protect public health. States are required by the CAA to develop and implement SIPs that assure attainment and maintenance of the NAAQS if an area within a state is designated nonattainment.

Because of the review timeline for the criteria pollutants, attaining the standards and developing the plans will continue to get more difficult in the future as standards are lowered. For Texas, this may be even more challenging because of the projected population growth, existing background levels, and pollution from other states and countries. According to the Texas State Data Center and the Office of the State Demographer, the population of Texas will increase by 71.5 percent between 2000 and 2040, or from 20.9 million to 38.5 million. As standards are lowered, it will become even more difficult to reduce emissions because of background emissions that are already in existence and emissions that move into the state that are beyond our control. Attaining the ozone standard has been the

biggest air quality challenge in Texas so far, and the future will offer additional challenges.

Revisions to the NAAQS

Ozone

On Jan. 19, 2010, the EPA proposed a reconsideration in the *Federal Register* of the 2008 eight-hour ozone standard of 0.075 parts per million (ppm). On Sept. 2, 2011, President Obama announced that he had requested the EPA to withdraw the proposed reconsidered ozone standard.

In a memo dated Sept. 22, 2011, from then EPA Assistant Administrator Gina McCarthy, the EPA announced that it would proceed with initial area designations under the 2008 eight-hour ozone standard, starting with the recommendations states made in 2009 and updating them with the most current, certified air quality data (2008 through 2010).

In a letter dated Oct. 31, 2011, the governor revised the March 2009 Texas designation recommendation for the 2008 eight-hour ozone standard based on the latest available, certified monitoring data for all areas in Texas for the 2008 through 2010 period. The revised recommendation removed Travis, Hardin, Jefferson, Orange, Hood, El Paso, Bexar, Gregg, Rusk, and Smith counties from the list of counties recommended to be nonattainment. This revised recommendation reflects the improved air quality in Texas between 2005 and 2010. The EPA sent a letter to the governor on Dec. 9, 2011, responding to the state's recommendations for area designations under the 2008 eight-hour ozone standard. In that letter, the EPA indicated that it intended to modify the state's recommended Dallas–Fort Worth (DFW) nonattainment area designation to include Hood and Wise counties and to modify the Houston–Galveston–Brazoria (HGB) nonattainment area designation to include Matagorda County.

The TCEQ submitted comments to the EPA on the proposed designations on Jan. 11, 2012. On Jan. 12, 2012, letters were sent to the judges, representatives, and senators for Hood, Wise, and Matagorda counties summarizing the DFW and HGB 2008

standard nonattainment designations, along with a copy of the TCEQ's response to the EPA.

Based on comprehensive technical analysis provided to the governor, he submitted a letter and technical analysis to the EPA on Feb. 29, 2012, opposing the expansion of the nonattainment areas because of a lack of scientific justification.

On May 21, 2012, the EPA published in the *Federal Register* final designations for the 2008 eight-hour ozone standard of 0.075 ppm. The DFW area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties) was designated nonattainment with a moderate classification and the HGB area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties) was designated nonattainment with a marginal classification. The EPA also published a final rule for the 2008 eight-hour ozone standard to establish classification thresholds, establish Dec. 31 of each relevant calendar year as the attainment date for each classification, and revoke the 1997 eight-hour ozone NAAQS for purposes of transportation conformity. The effective date for both rules was July 20, 2012.

On June 6, 2013, the EPA published in the *Federal Register* a proposed rule for implementing the 2008 eight-hour ozone NAAQS (78 Fed. Reg. 34178). The proposed rule addresses SIP requirements, the timing of SIP submissions, proposed revocation of the 1997 eight-hour ozone NAAQS, and anti-backsliding requirements for previous ozone standards. The TCEQ submitted comments on the proposed rule to the EPA on Aug. 19, 2013. The EPA is expected to finalize the rule in late 2014.

The EPA is currently reviewing the 2008 ozone NAAQS, and is expected to propose a revised eight-hour ozone standard of between 0.060 and 0.070 ppm in December 2014.

2012 Fine Particulate Matter (PM_{2.5}) Standard

The EPA revised the PM NAAQS on Dec. 14, 2012. For particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}), the EPA strengthened the annual primary

PM_{2.5} standard to 12 micro grams per cubic meter (µg/m³) and retained the current 24-hour primary PM_{2.5} standard of 35 µg/m³ using a three-year annual average. The EPA retained the current standard for particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀). Existing secondary standards for both PM_{2.5} and PM₁₀ were also retained. No counties in Texas are currently designated nonattainment nor are in maintenance status for the primary 24-hour or annual PM_{2.5} standards.

State designation recommendations to the EPA were due Dec. 13, 2013. The recommended designations were submitted by the governor to the EPA on Nov. 26, 2013.

The EPA's final designations are expected by Dec. 12, 2014. The designations will be based on 2011 through 2013 monitoring data or the latest certified data available. According to the preamble to the final PM NAAQS rulemaking, PM attainment demonstration SIPs will be due to the EPA three years after designations, or about 2018. However, a recent court ruling is expected to force the EPA to implement the 2012 PM_{2.5} NAAQS under Subchapter I, Part D, Subpart 4, of the FCAA, rather than under Subchapter I, Part D, Subpart 1, as the EPA originally planned. Implementation of the standard under Subpart 4 would mean that attainment demonstration SIP revisions would be due 18 months from finalization of designations by the EPA, around mid-June 2016.

There are also new near-road monitor requirements for PM_{2.5}. Data from the new near-road monitors will not be available in time for use in making initial attainment and nonattainment designations for the revised primary annual PM_{2.5} standard. Near-road monitors are expected to be operational in the DFW and HGB areas on Jan. 1, 2015, and monitors in the Austin–Round Rock and San Antonio areas are expected to be operational on Jan. 1, 2017.

2008 Lead Standard

On Oct. 15, 2008, the EPA lowered the NAAQS primary standard for lead from 1.5 to 0.15 micrograms of lead per cubic meter of ambient air. The secondary

standard was revised to be identical in all respects to the primary standard.

On Nov. 22, 2010, the EPA published a final rule designating a portion of Collin County (approximately 2.5 sq. mi.) surrounding the Exide Technologies facility, a lead-acid battery recycling facility, as nonattainment for the 2008 lead NAAQS. The effective date of the nonattainment designation was Dec. 31, 2010.

On Aug. 8, 2012, the commission adopted the Collin County Attainment Demonstration SIP Revision for the 2008 lead NAAQS and the agreed order between the TCEQ and Exide Technologies.

On June 4, 2012, the City of Frisco and Exide Technologies approved an agreement that would result in the sale of approximately 180 acres of undeveloped land surrounding the plant. As part of the agreement, Exide Technologies was to cease business operations at the Frisco Battery Recycling Center by Dec. 31, 2012. The SIP revision and agreed order adopted by the TCEQ and submitted to the EPA reflected this agreement to cease operations.

Based on a requirement in the agreed order between the TCEQ and Exide Technologies, a letter from Exide Technologies to the executive director was received dated Oct. 9, 2012, stating that Exide Technologies has elected to permanently shut down operations at its Frisco Battery Recycling Center. All recycling operations ceased operation on Nov. 30, 2012. The facility is now considered permanently shut down and most structures at the site have been demolished.

The EPA is currently reviewing the 2008 lead NAAQS and is expected to propose its decision on whether the existing standard is adequate in 2014.

2010 Primary Nitrogen Dioxide (NO₂) Standard

On Feb. 9, 2010, the EPA published the final rule to strengthen the primary nitrogen dioxide (NO₂) NAAQS. The rule establishes a new one-hour NO₂ standard at 100 parts per billion (ppb). The new standard focuses on short-term exposures to NO₂, which are generally greater on and near major roads. Currently, no area in Texas monitors above the 100 ppb standard. The EPA retained the current annual

average NO₂ standard of 53 ppb, but changed the monitoring network requirements to capture both peak NO₂ concentrations that occur near roadways and community-wide NO₂ concentrations.

On Feb. 17, 2012, the EPA published the initial designations identifying all areas in the United States as unclassifiable/attainment. The EPA's latest monitoring placement schedule addresses delays due to funding limitations. Near-road NO₂ monitors are currently operating in the San Antonio, HGB, DFW, and Austin–Round Rock areas. Second monitors in the DFW and HGB areas are scheduled to be operational by Jan. 1, 2015. El Paso and Edinburg–Mission–McAllen area monitors are scheduled to be operational by Jan. 1, 2017. Once the expanded network of NO₂ monitors is fully deployed and three years of air quality data have been collected, the EPA intends to redesignate areas based on data from the near-road monitoring network.

2010 Sulfur Dioxide (SO₂) Primary Standard

The EPA strengthened the sulfur dioxide (SO₂) primary NAAQS on June 2, 2010, with a new one-hour standard, met when the 99th percentile daily maximum one-hour SO₂ concentration averaged over three years does not exceed 75 ppb. According to implementation guidance included in the preamble to the final NAAQS, new requirements include fully operational air quality monitors in 10 Texas locations by Jan. 1, 2013, and the use of refined AERMOD dispersion modeling to assess compliance for large SO₂ sources in areas designated as unclassifiable by June 2013.

On July 25, 2013, the EPA completed its initial round of SO₂ nonattainment designations, basing them on monitored NAAQS violations within existing SO₂ monitoring networks. The EPA designated 29 areas in 16 states as nonattainment for the 2010 standard. None of the areas designated nonattainment are in Texas.

On May 13, 2014, the EPA proposed its data requirements rule for the 2010 SO₂ NAAQS. The proposed rule sets emissions thresholds for states' use in determining where further monitoring or modeling is needed to assess compliance with the NAAQS. Three

emissions-threshold options were proposed, ranging from 1,000 tons per year in metropolitan areas with a population of one million or more to 10,000 tons per year in areas outside metropolitan areas with a population of one million or more.

The EPA intends to issue designations for the remaining areas in separate future actions. Areas that states identify as exceeding the NAAQS based on modeling are expected to be designated nonattainment by the EPA in 2017. Attainment demonstration SIP revisions for these areas would be due to the EPA in 2019. Monitors in areas that the state chooses to use monitoring data to determine compliance with the NAAQS are required to be in place by Jan. 1, 2017, and the EPA would make nonattainment designations for those areas in December 2020. Attainment demonstration SIP revisions for these areas would be due to the EPA in 2022.

2011 Carbon Monoxide (CO) Standard

On Aug. 12, 2011, the EPA finalized the carbon monoxide (CO) NAAQS rule, which will retain the existing CO primary standards: an eight-hour standard of 9 ppm and a one-hour standard of 35 ppm. As with PM_{2.5} and NO₂, there are new near-road monitor requirements for CO. Near-road monitors are scheduled to be operational in the DFW and HGB areas by Jan. 1, 2015, with the Austin–Round Rock and San Antonio areas to be operational by Jan. 1, 2017.

Eight-Hour Ozone State Implementation Plan (SIP) Revisions

Dallas–Fort Worth Area

The DFW 1997 eight-hour ozone standard nonattainment area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties) is currently classified as serious nonattainment. The nonattainment area was reclassified to serious effective Jan. 19, 2011, establishing an attainment deadline of June 15, 2013. The commission adopted the reclassification attainment demonstration and reasonable further progress (RFP) SIP revisions on

Dec. 7, 2011. The reclassification attainment demonstration SIP revision used photochemical modeling in combination with a weight-of-evidence (WoE) evaluation to demonstrate that the DFW area would attain the 1997 eight-hour ozone standard by the June 15, 2013 attainment deadline. The area, however, did not attain the 1997 standard by that deadline. On May 20, 2014, the Sierra Club filed a suit against the EPA for failure to take final action on the DFW Attainment Demonstration SIP Revision and to reclassify the area to severe nonattainment.

On May 21, 2012, the EPA published final designations and classifications for the 2008 eight-hour ozone standard. Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties were designated nonattainment and classified as moderate, effective July 20, 2012. On July 18, 2012, the TCEQ submitted to the EPA a petition for reconsideration of the inclusion of Wise County in the DFW 2008 eight-hour ozone nonattainment area. On Dec. 14, 2012, the EPA denied the TCEQ's petition and request for stay of the final rule; in response, the TCEQ also filed a petition for review of the EPA's denial of the petition and request for stay.

The attainment demonstration and reasonable further progress (RFP) SIP revisions for the DFW 2008 eight-hour ozone nonattainment area are due to the EPA in July 2015. The DFW nonattainment area is required to attain the 2008 eight-hour ozone standard by Dec. 31, 2018.

Houston-Galveston-Brazoria Area

The HGB 1997 eight-hour ozone standard nonattainment area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties) is currently classified as severe with an attainment date as expeditious as possible, but no later than June 15, 2019. The HGB 2008 eight-hour ozone standard nonattainment area, composed of the same eight counties, is currently classified as marginal with a Dec. 31, 2015, attainment date. Because the area is classified as marginal, the only planning

requirement the TCEQ is required to submit to the EPA is an emissions inventory. The TCEQ is scheduled to adopt a SIP revision with emissions inventories for the HGB 2008 eight-hour ozone nonattainment area on July 2, 2014. The emissions inventory SIP revision is due to the EPA on July 20, 2014. If the HGB area does not meet its Dec. 31, 2015, attainment deadline, the area will be reclassified by the EPA to a moderate nonattainment area and further planning requirements will have to be submitted to the EPA, including a modeled attainment demonstration and a reasonable further progress plan.

On Jan. 2, 2014, the EPA published final approval of the March 2010 HGB Attainment Demonstration and RFP SIP Revisions and the 2013 HGB Motor Vehicle Emission Budget SIP Revision (78 Fed. Reg. 55037 and 55029) for the 1997 eight-hour ozone standard. The EPA's analysis of the photochemical modeling and the WoE conclude that the HGB area will reach attainment of the 1997 eight-hour ozone standard by the end of the 2018 ozone season.

Other SIP Revisions

One-Hour Ozone Re-designation Substitute for the Houston-Galveston-Brazoria Nonattainment Area

The HGB area was classified as a severe nonattainment area in 1990 for the one-hour ozone NAAQS, which was revoked on June 15, 2005. Under a severe classification, the HGB area was given until Nov. 15, 2007, to attain the one-hour ozone NAAQS, but the area did not monitor attainment by that deadline. On Feb. 2, 2012, the EPA published a proposed determination that the HGB area did not attain the one-hour NAAQS by its attainment date. However, ambient air monitoring data for 2011, 2012, and 2013 indicate that the HGB area is meeting the one-hour ozone NAAQS. Because the EPA can no longer formally redesignate areas to attainment after the revocation of a standard, the TCEQ submitted certified ambient air monitoring data to the EPA to request a finding of attainment for the HGB area for the revoked one-hour standard.

On June 6, 2013, the EPA published proposed rulemaking to implement the 2008 ozone NAAQS. Included in the proposed rulemaking is a mechanism for lifting anti-backsliding obligations under a revoked one-hour ozone NAAQS. According to the EPA's proposal, a state can provide a showing, termed a "redesignation substitute," based on FCAA, Section 107(d)(3)(E), redesignation criteria to demonstrate that an area qualifies for lifting anti-backsliding obligations under a revoked standard. The EPA's approval of the showing would have the same effect on the area's nonattainment anti-backsliding obligations as would a redesignation to attainment for the revoked standard.

Examples of anti-backsliding requirements that apply to the HGB severe one-hour ozone nonattainment area are contingency measures and a penalty fee provision. The anti-backsliding requirement for contingency measures under FCAA, sections 172(c)(9) and 182(c)(9), has already been achieved in the HGB area, and a final determination of failure to attain does not trigger additional emission reductions. The anti-backsliding requirement to implement a penalty fee program under FCAA, sections 182(d)(3) and 185, was triggered with the EPA's failure-to-attain determination, and it continues to apply to the HGB one-hour ozone nonattainment area unless the obligation is terminated. On May 22, 2013, the commission adopted rules to implement the penalty fee provision.

To ensure timely termination of the penalty fee requirement, the TCEQ is taking two actions. First, in accordance with the EPA's proposed rulemaking to implement the 2008 ozone NAAQS, the TCEQ will submit to the EPA a report that meets the substance of FCAA, Section 107(d)(3)(E), redesignation criteria in July 2014. The report will be submitted to the EPA via letter from the agency, and will not be submitted as a revision to the SIP. The TCEQ will follow this submittal with a SIP revision, which will contain the same elements included in the report, but will include the most current emissions inventory data based on the EPA's updated mobile source emissions inventory model, MOVES 2014. The SIP revision is scheduled to be proposed in Nov. 2014 and adopted in July 2015.

Second 10-Year CO Maintenance Plan for El Paso Area

On Jan. 30, 2008, the commission adopted a redesignation request and maintenance plan SIP revision for the El Paso carbon monoxide (CO) nonattainment area. The maintenance plan was developed to ensure continued attainment of the CO NAAQS for a period of at least 10 years from the effective date of EPA approval of the redesignation to attainment. The EPA approved the El Paso CO redesignation request and maintenance plan SIP revision, and El Paso was redesignated to attainment for CO, effective Oct. 3, 2008. The approved maintenance plan included a commitment to submit a second 10-year maintenance plan two years before the end of the first 10-year period, or Oct. 3, 2016.

Re-designation and Maintenance Plan for Collin County Lead Nonattainment Area

Effective Dec. 31, 2010, the EPA designated a portion of Collin County surrounding the Exide Technologies lead-acid battery recycling facility as nonattainment for the 2008 lead NAAQS. On Aug. 8, 2012, the commission adopted the Collin County Attainment Demonstration SIP Revision for the 2008 Lead NAAQS and the agreed order between the TCEQ and Exide Technologies.

The attainment deadline for the Collin County lead nonattainment area is Dec. 31, 2015; however, because of the form of the standard, the earliest the area will be able to meet the standard is March 2016. Though most structures at Exide Technologies' former battery recycling facility have been demolished, there remain portions of the site's remediation that may lead to ambient concentrations of lead that exceed the NAAQS. The City of Frisco is currently in the process of deciding how to move forward with remediation at the site.

A date of completion of a redesignation request and maintenance plan for the Collin County lead nonattainment area cannot be estimated until a decision is made on how to proceed with remediation at the site and the ambient air monitoring data show that the area has met the NAAQS.

Infrastructure and Transport SIP

Section 110(a) of the CAA requires that each state develop and submit an infrastructure SIP revision demonstrating how the state provides for the implementation, maintenance, and enforcement of a new or revised NAAQS within three years following the promulgation of the NAAQS. One of the key infrastructure provisions, 110(a)(2)(D)(i)(I), requires that a state's SIP include adequate provisions to prohibit emissions activity in the state from contributing significantly to nonattainment or interfere with maintenance in any other state.

The EPA promulgated a cap-and-trade program in 2005 called the Clean Air Interstate Rule (CAIR). In accordance with the CAA transport requirements, CAIR was designed to aid nonattainment areas in downwind states in complying with the 1997 24-hour and annual $PM_{2.5}$ standards and 1997 eight-hour ozone standard. Twenty-eight eastern states and the District of Columbia are subject to CAIR for contributing to downwind $PM_{2.5}$ or ozone. CAIR applies specific budgets to subject states for annual SO_2 , annual NO_x , and ozone-season NO_x , depending on the determination of a state's downwind contribution. Texas was found to contribute to downwind $PM_{2.5}$ nonattainment in Illinois and was required by a federal implementation plan (FIP) to comply with annual NO_x and SO_2 budgets. CAIR was subsequently challenged in federal court, and in 2008 the rule was remanded to the EPA by the D.C. Circuit Court of Appeals for reconsideration. In 2011, the EPA finalized the Cross-State Air Pollution Rule (CSAPR) as the replacement for CAIR.

On Aug. 21, 2012, the D.C. Circuit Court vacated the CSAPR and ordered the EPA to continue to administer CAIR while it works on a replacement transport rule. The EPA and various environmental groups petitioned the U.S. Supreme Court to review the D.C. Circuit Court's decision on the CSAPR. On June 24, 2013, the supreme court granted the petitions and on Dec. 10, 2013, it heard oral arguments in the case.

On April 29, 2014, the supreme court issued a ruling in favor of the EPA, reversing the D.C. Circuit

Court's decision on the CSAPR. However, the supreme court remanded the case back to the D.C. Circuit Court for further proceedings and the stay of the CSAPR remains in effect. Therefore, the disposition of the CSAPR is pending further action by the D.C. Circuit Court. As a result, CAIR continues to remain in place until a replacement is implemented.

The TCEQ has submitted to the EPA infrastructure and transport SIP revisions for the 1997 ozone, 1997 PM_{2.5}, 2006 PM_{2.5}, 2008 ozone, 2008 lead, 2010 NO₂, and 2010 SO₂ NAAQS. An infrastructure and transport SIP revision for the 2012 PM_{2.5} standard is due to the EPA in December 2015.

Regional Haze

Guadalupe and Big Bend National Parks are Class I areas of Texas identified by the federal government for visibility protection, along with 154 other national parks and wilderness areas within the United States. The regional haze program is a long-term air quality program requiring states to establish goals and strategies to reduce visibility-impacting pollutants in the Class I areas and meet a national visibility goal by 2064. In Texas, the pollutants influencing visibility are primarily NO_x, SO₂, and PM. Regional haze program requirements include progress reports due to the EPA in 2014 and every five years thereafter, to demonstrate progress toward the visibility goal. Another regional haze SIP will be due in 2018 and every 10 years thereafter, through 2064.

The initial Texas regional haze SIP revision was adopted by the commission on Feb. 25, 2009, and submitted to the EPA on March 19, 2009. This visibility improvement plan relied primarily on Clean Air Interstate Rule (CAIR) emission reductions that the EPA previously determined sufficient to satisfy best available retrofit technology (BART) requirements for electric generating units (EGU). The regional haze SIP revision projects Texas Class I areas will not meet the 2064 federal goal for visibility due to emissions from the Ohio River Valley and international sources. Big Bend National Park will meet the federal visibility goal in the year 2155 (91 years after 2064) and the

Guadalupe National Park will meet the federal visibility goal in the year 2081 (17 years after 2064).

In January 2009, the EPA issued notice to 37 states (including Texas) of failure to timely submit acceptable regional haze SIP revisions, initiating a two-year federal implementation plan (FIP) clock for those states, but the EPA mandated no associated sanctions. On Dec. 30, 2011, the EPA issued notice to Texas and other states that because their regional haze SIP revisions relied on CAIR to satisfy certain requirements, it was proposing a limited disapproval of the states' SIPs and a FIP to replace reliance on CAIR with reliance on CSAPR. On June 7, 2012, the EPA published final limited disapproval for the Texas regional haze SIP, but did not finalize a FIP for Texas in order to allow more time for the EPA to assess the Texas regional haze SIP revision. A November 2012 memorandum from EPA headquarters to its regional offices may help the EPA evaluate how the court-ordered vacatur of CSAPR will affect the EPA's proposed limited disapproval and FIP. CAIR will remain in place until the EPA develops a valid replacement for CAIR. The EPA is expected to take final action on the 2009 regional haze SIP in August 2015.

On Feb. 26, 2014, the commission adopted the 2014 Five-Year Regional Haze SIP Revision. This SIP revision is a required progress report that contains a summary of emissions reductions achieved, an assessment of visibility conditions and changes for each Class I area in Texas and other Class I areas that Texas may affect, an analysis of emissions reductions by pollutant, and a review of Texas' visibility monitoring strategy and any necessary modifications.

Emissions Banking and Trading

The regulated community uses emission banking and trading to offset emissions from newly permitted sources in nonattainment areas. Economic expansion in the HGB area has substantially increased both the demand for and cost of the emission reduction credits typically used as offsets. These constrained market conditions could affect future growth in the HGB

area. In response, there has been significant interest in identifying options to generate new emission reduction credits and using the alternative options available to satisfy offset requirements.

Texas Emissions Reduction Plan (TERP)

The Texas Emissions Reduction Plan (TERP) was established in 2001 under Senate Bill (SB) 5, 77th Texas Legislature, Regular Session. Included in the TERP are the Diesel Emissions Reduction Incentive Program, the Drayage Truck Incentive Program, the Texas Clean Fleet Program, the Alternative Fueling Facilities Program, the Clean Transportation Triangle Program, the Texas Natural Gas Vehicle Grant Program, the Light-Duty Motor Vehicle Purchase or Lease Incentive Program, and the New Technology Implementation Grants Program.

Diesel Emissions Reduction Incentive Program

The Diesel Emissions Reduction Incentive Program (DERI) was established in 2001 as part of the original implementation of the TERP and is administered by the TCEQ. This program provides voluntary incentive grants to reduce NO_x from mobile sources, primarily diesel engines. DERI offers incentives for a variety of activities, such as replacing or repowering old vehicles or equipment with newer and cleaner models, retrofitting engines with NO_x emission-reduction technology, and providing the infrastructure for idle reduction, electrification, and the use of cleaner-burning fuels.

Through Aug. 31, 2014, a total of 9,734 projects had been funded. Those projects comprised 15,980 activities, and included pass-through grants awarded by the Railroad Commission of Texas, the Texas General Land Office, the North Central Texas Council of Governments, and the Houston-Galveston Area Council under third-party grant contracts from the TERP program. More than \$943 million in grant funding has been awarded for replacements and upgrades to approximately 15,980 vehicles and pieces of equipment. These projects are expected to reduce NO_x emissions by more than 176,364 tons over the

life of the projects. Because of the need to revise the program rules and guidelines as a result of legislative changes in 2013, no application period was held in fiscal 2014. The next grant application period was expected to be opened in September 2014.

Drayage Truck Incentive Program

The Drayage Truck Incentive Program (DTIP) was established in 2013 by SB 1727, 83rd Texas Legislature, Regular Session. The DTIP will provide grants for the replacement of drayage trucks operating in and from seaports and rail yards located in the state's air quality nonattainment areas. The first application period for the DTIP was expected to open in September 2014 after adoption of the program rules and guidelines. The DTIP is allocated \$3.1 million for the fiscal biennium.

Texas Clean Fleet Program

In 2009, the 81st Texas Legislature, Regular Session, enacted SB 1759, establishing the Texas Clean Fleet Program (TCFP), to be administered by the TCEQ. The purpose of this program is to encourage entities operating a large fleet of vehicles in Texas, including at least 20 eligible diesel-powered vehicles, to replace the diesel vehicles with alternative-fuel or hybrid vehicles. Projects must result in at least a 25 percent reduction in NO_x emissions or emissions of other pollutants, as established by the commission.

The eligible grant amounts are set according to the model year and emissions of the vehicle and engine being replaced. The alternative-fuel or hybrid vehicle being purchased must be certified to the current federal emissions standards.

From 2009 through August 2013, over \$23.6 million in TCFP grants were awarded for 12 projects to replace 307 vehicles. These projects are projected to reduce NO_x emissions by 314.5 tons over the life of the projects. The next application was expected to open in June 2014.

Texas Natural Gas Vehicle Grant Program

In 2011, the 82nd Texas Legislature, Regular Session, enacted SB 385, establishing the Texas Natural Gas

Vehicle Grant Program (TNGVGP), to be administered by the TCEQ. The TNGVGP provides grant funding to cover up to 90 percent of the incremental cost of replacement or repower (engine replacement) of medium- and heavy-duty vehicles with natural-gas vehicles and engines. The grant recipient must commit to operate the grant-funded vehicle at least 75 percent of annual use in counties located in nonattainment areas, other designated TERP-affected counties, and counties along and within the Clean Transportation Triangle, made up of the interstate highways connecting the cities of Houston, Dallas, Fort Worth, and San Antonio. From 2011 through August 2013, almost \$26 million in TNGVGP grants were awarded for 31 projects to replace 477 vehicles. These projects are projected to reduce NO_x emissions by 816 tons over the life of the projects. The first application period of fiscal 2014 opened Jan. 2, 2014. By May 2014, the program had received over 85 applications for more than \$26.5 million. The allocated funding for the fiscal biennium is \$24.8 million. Therefore, it is likely that once these applications are reviewed and the grants awarded, the awards will use most, if not all, of the available funding for the biennium.

Alternative Fueling Facilities Program

In 2011, the 82nd Texas Legislature, Regular Session, enacted SB 385, establishing the Alternative Fueling Facilities Program (AFFP), to be administered by the TCEQ. The AFFP provides grant funding of the lesser of 50 percent of the costs or \$500,000 for development of fueling facilities to provide alternative fuel in the state's nonattainment areas. Alternative fuels include natural gas, propane, biodiesel, hydrogen, electricity, and a fuel that contains at least 85 percent methanol by volume. The first grant application period opened in May 2012 and the program funded four projects for a total of \$1,786,602. The most recent grant application period closed in February 2014, with 55 applications received for possible funding. The requested grant amount is well in excess of the \$7.76 million allocated to this program for the fiscal biennium. The grant awards were expected to be made by June 2014.

Clean Transportation Triangle Program

In 2011, the 82nd Texas Legislature, Regular Session, enacted SB 385, establishing the Clean Transportation Triangle (CTT) Program, to be administered by the TCEQ. The CTT provides grant funding for a portion of the cost of fueling facilities for compressed and liquefied natural gas within three miles of the interstate highways connecting the cities of Houston, Dallas, Fort Worth, and San Antonio. Two application periods were held in 2012 and 2013, with 18 projects funded for a total of \$3.9 million. The most recent application period closed in February 2014, with 54 applications received for possible funding. The requested grant amount is well in excess of the \$7.76 allocated to this program for the fiscal biennium. The grant awards were expected to be made by June 2014.

Light-Duty Motor Vehicle Purchase or Lease Incentive Program

The Light-Duty Motor Vehicle Purchase or Lease Incentive Program (LDPLI) was originally established in 2001 under the TERP enabling legislation, SB 5. Under the original program criteria, the Texas Comptroller of Public Accounts (CPA) was to provide rebates for the purchase of light-duty motor vehicles purchased or leased in Texas that met certain NO_x emission standards. During the first fiscal biennium, the CPA did not implement the LDPLI because the revenue into the TERP fund did not reach the level needed to implement the program, and beginning in 2003 the Legislature did not appropriate funds for the program.

In 2013, SB 1727 revised the LDPLI criteria to provide rebates for the purchase or lease of light-duty motor vehicles powered by compressed natural gas, liquefied petroleum gas, or plug-in electric drive. Responsibility for implementing the LDPLI was transferred to the TCEQ and funding was allocated for the program of up to \$7.76 million for the fiscal biennium. The TCEQ opened the LDPLI for applications in May 2014, after adoption of the program rules, on April 30, 2014.

New Technology Implementation Grants Program

In 2009, the 81st Texas Legislature, Regular Session, enacted HB 1796, which authorized the TCEQ to administer the New Technology Implementation Grants (NTIG) Program. The NTIG Program's primary objective is to offset the incremental cost of emission reductions from facilities and other stationary sources in the State of Texas. Projects that may be considered for a grant under the program include:

- Advanced clean-energy projects (ACEP) for new or modified sources.
- New technology projects that reduce emissions of regulated pollutants from point sources and involve capital expenditures that exceed \$500 million.
- Electricity storage projects related to renewable energy.

The first grant round was administered in 2010, with two projects awarded over \$6 million in grant funds. The two projects involve systems to capture and store energy generated from wind, including a compressed air energy storage system and a combined compressed air and thermal energy storage system. The next application period opened in April 2014, with a total of \$4.65 million allocated to this program for the fiscal biennium.

Federal Greenhouse Gas Regulations

The EPA adopted a number of regulations addressing greenhouse gas, including the Endangerment Finding, Timing Rule, Tailpipe Rule, Tailoring Rule, GHG State Implementation Plan (SIP) Call, and the EPA's partial Texas SIP disapproval and issuance of a GHG federal implementation plan (FIP) that gives the EPA the power to issue permits to GHG sources in Texas. The State of Texas, other states, and industry groups submitted petitions for review in the federal courts up through the U.S. Supreme Court. The court heard oral argument on Feb. 24, 2014, and a decision is expected in summer 2014.

Under the GHG FIP, the EPA implemented a GHG permitting program for major sources. As of March 13, 2014, the EPA has received 82 GHG PSD

permit applications. Twenty-eight permits have been issued with the EPA's processing timeframes ranging from 240 days to 684 days. Fifty-four applications remain pending with the EPA.

HB 788 (83rd Texas Legislature) directed the TCEQ to initiate rulemaking to lay the groundwork for Texas to begin the permitting of GHG emissions, to the extent required by federal law. Once the rules are completed and approved by the EPA, the TCEQ, instead of the EPA, would be the issuing authority for GHG permits in Texas. The rules were proposed on Oct. 23, 2013, and adopted on March 26, 2014. On Feb. 18, 2014, the EPA published a proposed approval of the TCEQ's proposed GHG permitting regulations, and proposed to rescind the FIP. The TCEQ anticipates becoming the permitting authority for GHGs in summer 2014.

The TCEQ anticipates that many existing sites with GHG emissions will trigger the Title V GHG emissions threshold. This will result in the need for additional staff resources to perform associated monitoring, compliance, and enforcement duties for these additional Title V permits. In order to meet this need, the Legislature authorized additional FTEs to the agency for TCEQ Compliance and Enforcement staff that will be added each year beginning in fiscal 2015 and ending in fiscal 2018.

New Source Performance Standards and Existing Power Plant Emission Guidelines under CAA 111

On Sept. 20, 2013, the EPA re-proposed its new source performance standard (NSPS) for emissions of GHGs from new fossil fuel-fired electric utility generating units (EGUs), replacing its April 13, 2012, initial proposal. The new proposal was published in the *Federal Register* on Jan. 8, 2014. TCEQ staff is currently reviewing the new proposal and developing comments to submit to the EPA.

Not only is the rule technically flawed, but if the EPA finalizes the newly proposed rule, the result will very likely be that no new coal or petroleum-coke plants will be sited in the future, especially if all three

EPA power-plant rules (CSAPR, MATS, and CO₂ NSPS) are upheld. Decreased fuel diversity in the electric power generation industry will have adverse consequences for affordable and reliable electric power. These adverse impacts in turn have serious impacts on public health, especially in vulnerable, low-income populations.

The EPA released its proposed emission guidelines for existing power plants on June 18, 2014.

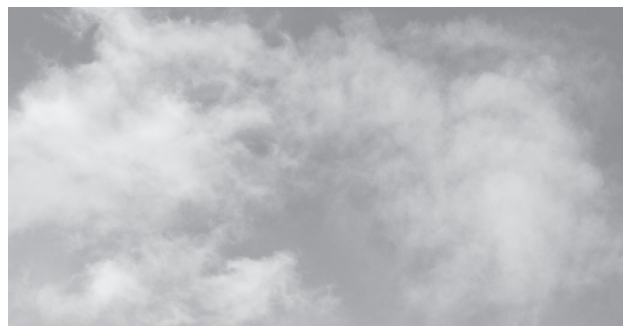
Potential Credit for Energy Efficiency and Renewable Energy Programs

In the past, the TCEQ has claimed nitrogen oxides (NO_x) emission credit for energy efficiency programs in several revisions to the state implementation plan (SIP). The TCEQ's current policy is to acknowledge the emission benefits of energy efficiency and renewable energy (EE/RE) programs for the SIP in what is known as the weight-of-evidence discussion of a SIP attainment demonstration. The TCEQ has not claimed specific quantified NO_x emission credit for EE/RE programs in the SIP since 2005.

Impact on Tax Relief for Pollution Control Property Program

The TCEQ is responsible for determining whether a facility uses certain property, in whole or in part, for pollution control. Through an application process, a facility receives a positive use determination indicating that the property is used either wholly or partly for pollution control. The facility then submits the determination along with an exemption request to its local appraisal district. The amount of the exemption is based on the appraisal district's valuation of the property and the local tax rate.

The program processes an average of 920 applications annually. The TCEQ expects significant interest in the program due to future federal greenhouse gas regulation. This will not only increase application submittals for projects involving energy efficiency, but require substantial review to differentiate the environmental benefit from the production aspect for these projects.



Continued Air Permit Process Streamlining Efforts

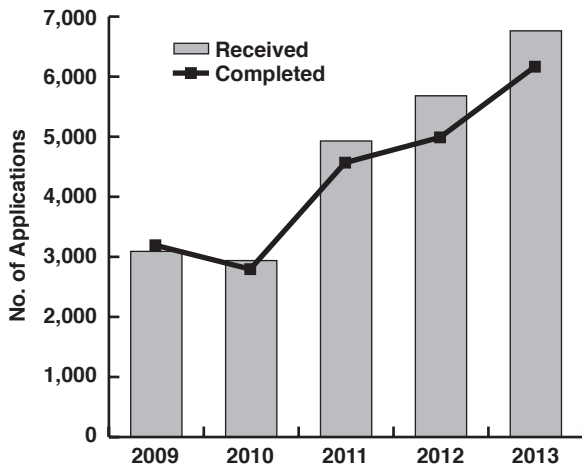
The Air Permits Division (APD) has continued to streamline air permit processing based on current and future workload demands. Based on trends over the last five years, the division is affected by a significantly increasing workload. Over 9,500 applications were received in 2012 and slightly over 10,000 applications were received in 2013, as compared to 4,900 received in 2009. The APD has taken additional steps to improve efficiencies in the permitting process. These efforts include:

- Improving application submittal guidance.
- Conducting a more extensive administrative review, which resulted in better-quality permit applications.
- Continuing the development of a more automated process for handling specific types of projects, such as oil and gas.
- Developing automated advances that enhance the APD's ability to process applications electronically.
- Optimizing electronic resources, such as ePermitting, so that a large percentage of these applications can be received, processed, and completed electronically.

Approximately 6,700 of the applications received in 2013 were permits by rule (PBRs). The APD's long-term goal is to reduce the number of PBRs processed on paper by about 50 percent.

The following chart shows the number of PBR applications received and the number of PBR projects completed over the last five years.

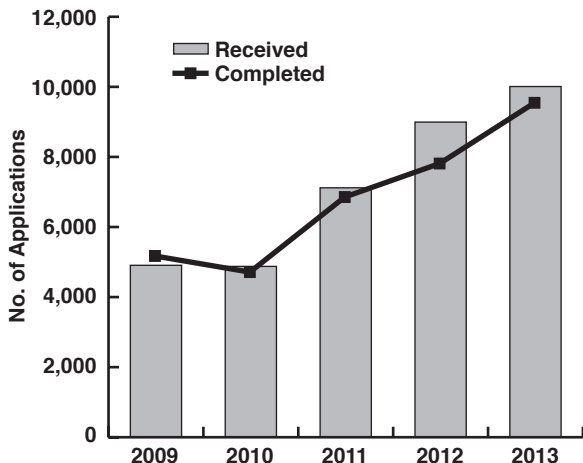
Figure 6.
PBRs: Applications Received and Projects Completed, 2009–2013



Data Source: Air Permits Division, TCEQ.

The next chart shows the total number of all new source review (NSR) applications received over the last five years. In addition, the chart shows the total number of projects completed.

Figure 7.
NSRs: Applications Received and Projects Completed, 2009–2013



Data Source: Air Permits Division, TCEQ.

The APD has experienced a marked increase in applications from specific industry sectors, which include oil and gas, refineries, and chemical plants. This has resulted in significantly increased workloads in the Rule Registrations Section and the Chemical New Source Review Permits Section, and an increased workload from the ancillary industries, such as utilities, metal-parts coating, and concrete batch plants.

Air Quality Monitoring

The TCEQ continues to deploy air quality monitoring equipment in order to meet EPA and SIP requirements, as well as address state air quality concerns.

Expansion of the Monitoring Network Due to Changing Air Quality Standards

The State of Texas monitors air quality in the state with its extensive network of air quality monitors. Over the next several years, the TCEQ will be dedicating resources to the expansion of the monitoring network to meet additional federal monitoring requirements. Highlights of the network expansion include:

- Additional ozone monitors may be required due to revisions to the ozone standard or to the minimum monitoring requirements (number unknown at this time).
- Additional SO₂ monitors will be required by Jan. 1, 2017. The EPA anticipates releasing its SO₂ Data Requirements Rule and SO₂ Implementation Rule, which will determine the number of additional monitors required, in May 2014. Preliminary estimates based on information in the draft technical-assistance document released in January 2014 indicate that a range of 15 to over 120 additional SO₂ monitors may be required.
- Two new near-road NO₂, PM_{2.5}, and CO monitors will be required in Houston and Dallas beginning in 2015.
- PM_{2.5} and CO near-road monitors will be required in Austin and San Antonio, as well as NO₂ near-road monitors in El Paso and Edinburg-Mission-McAllen, beginning in 2017.

Overall, these new requirements are expected to result in between 19 and 124 new monitoring locations and approximately 30 new monitoring instruments around the state by 2017.

Implementation of HB 2305

House Bill (HB) 2305, 83rd Texas Legislature, 2013, Regular Session, replaces the current Texas dual inspection and registration sticker system with a single vehicle registration insignia sticker system (single-sticker system) and modifies the method used to collect the state's portion of the vehicle safety and emissions inspection fee. Changes needed to comply with HB 2305 must be implemented by March 1, 2015. The TCEQ is currently working with the Department of Public Safety and the Department of Motor Vehicles to implement changes to the current process by March 1, 2015.

EPA Review of Exceptional Event Demonstrations

The federal Clean Air Act allows ambient air monitoring data that has been affected by an exceptional event to be removed from consideration when determining compliance with the NAAQS. The current rule, 40 CFR 50.1, establishes six legal requirements for meeting the definition of an exceptional event. Specific guidance on how these requirements could be met is not available in current rule or the EPA's *Interim Guidance to Implement Requirements for the Treatment of Air Quality Data Influenced by Exceptional Events*, which was released on May 10, 2013. Rather, states must provide a demonstration of the impact of the event on measured concentrations that meets the EPA's satisfaction.

The TCEQ has spent about six months and the equivalent of 700+ hours of employee time developing each of the four exceptional event demonstration packages currently pending with the EPA. As the NAAQS are lowered, the ability to more efficiently demonstrate exceptional events will become more critical to attaining the standard. The TCEQ has provided comments on the EPA's draft guidance and has participated in listening sessions hosted by the EPA

in August 2013. The EPA anticipates releasing revised exceptional event rules in April 2014, with final rule promulgation in April 2015.

The TCEQ continues to await concurrence on Exceptional Event Technical Demonstrations for PM_{2.5} exceedance exceptional event demonstrations previously submitted to the EPA. Timely review and approval by the EPA continues to be an issue.

Water Quality and Quantity Issues

Drought

The drought-management activities of the TCEQ began in late 2010, as statewide drought conditions began developing. The drought has persisted, with periods of varying intensity, through 2011, 2012, 2013, and the present. At the drought's most intense—in October of 2011—97 percent of the state, including all or part of every county, was experiencing extreme or exceptional drought. Rains have resulted in improvements since then; nevertheless, drought conditions still persist across much of the state.

As drought conditions intensified in late 2010, the TCEQ implemented drought-response activities. Persistent drought has required sustained drought management, and we continue to evaluate, modify, and expand our response activities to address challenges.

Water Rights and Senior Calls

The TCEQ is the state agency charged with managing surface water rights in Texas. Surface water rights are managed through the issuance and enforcement of water-right permits. Among permitted water-right holders, those permit holders that got their authorization first (senior water rights) are entitled to receive their water before those water-right holders that got their authorization later (junior water rights). If a water-right holder is not getting water they are entitled to, they can call on the TCEQ to take action to enforce the priority doctrine—a senior call.

As drought conditions have persisted across the state, the TCEQ has continued to respond to senior calls on surface water. From 2012 to 2013, the TCEQ received 24 senior calls on surface water from municipal, industrial, irrigation, and domestic and livestock users in non-watermaster areas in the Brazos and Colorado river basins. In response to these priority calls, the TCEQ suspended or adjusted over 1,600 water rights and stopped issuing temporary water-right permits. From 2012 to 2013, the TCEQ received nine priority calls from domestic and livestock users in the Concho and South Texas Watermaster areas. As of October 2013, all senior calls were rescinded and all suspensions were lifted as drought conditions improved.

During the current drought, the TCEQ staff enforced curtailments through on-the-ground and aerial investigations. Field staff also conducted stream-flow monitoring to help the agency make informed decisions regarding curtailments and management of senior calls. Experience gained from recent drought impacts allows the TCEQ to enhance its ability to respond more efficiently and effectively when water supplies are again drained by drought. Drought also affects power-generation facilities, which need cooling water for proper functioning. To help prevent possible impacts to power, the TCEQ—in cooperation with the Public Utility Commission, the Electric Reliability Council of Texas, and other electric reliability entities—has developed procedures for these entities to request enforcement discretion in a power emergency.

Curtailment Rulemaking

The TCEQ's Sunset bill (HB 2694) amended the Texas Water Code to state that the executive director may temporarily suspend or adjust rights during times of drought or emergency shortage of water. On April 11, 2012, the TCEQ adopted rules that define drought or other emergency shortage of water and specify conditions and terms under which the executive director may exercise authority in non-watermaster areas. The TCEQ has implemented these rules in responding to senior calls in 2012 and 2013 non-watermaster areas.

Agency Outreach

As drought conditions intensified in late 2010, the agency's outreach efforts as a whole correspondingly increased. Information about drought conditions and permit suspensions was communicated to state leadership, legislative officials, county judges, county extension agents, water-right permit holders, and the media beginning in 2011 and as the TCEQ responded to senior calls.

In 2012, the TCEQ conducted eight drought emergency-planning workshops across the state for local government officials, board members, and their water system operators. These workshops—conducted in Brownsville, Kerrville, New Braunfels, Liberty, Midland, Lubbock, Nacogdoches, and San Angelo—reached more than 550 attendees, and offered information and tools to prevent and mitigate water outages. Workshop participants also examined future drought scenarios to outline their step-by-step plans for finding alternative sources of water in the case of a drought emergency. Video of the workshop was also posted on YouTube, and it has been viewed 641 times. In 2014, the TCEQ is planning a series of workshops for small water systems that will encourage systems to plan and prepare for preventing system failures. Topics such as maintenance, measuring water levels, developing BMPs, and identifying options for alternative sources will be covered.

The TCEQ's response efforts were coordinated through the TCEQ Drought Task Force Team. This team is a multi-disciplinary, multi-agency unit that ensures communication and coordination of drought issues within the TCEQ and functions to determine the course of action necessary to respond to actual drought impacts and to potentially prevent critical drought issues from arising. In addition, an Emergency Drinking Water Task Force is convened to assist drought-stricken water systems. Below are some examples of the coordination of drought-response efforts:

- Mail-out of notification letters alerting water-right holders of possible or actual curtailments or suspensions resulting from drought.

- Consultation with public water systems and monitoring of their implementation of drought contingency plans.
- Coordination of media responses and press releases to address specific drought impacts and to promote water conservation.
- Coordination of emergency technical assistance in alleviating water crises by temporarily providing bulk water during drought-related water system outages.
- Coordination of and participation in targeted Texas Water Infrastructure Coordination Council (TWICC) events to assist in providing information for available funding sources and other resources for local water systems, notably in relation to the Rio Grande Valley's need to address shortages of water related to the Mexican water debt.
- Conducting stakeholder meetings for irrigation districts and potentially affected public water systems to assist in the coordination of providing water for affected PWSs.
- On-site investigations to ensure compliance with water-right suspensions and to monitor stream conditions.
- Conducting stream-flow monitoring and regular observation of drought-affected streams.
- Participation with other state agencies on the Joint Information Center and Drought Preparedness Council.

New Issues and Actions

Because of the exceptional and prolonged nature of drought in Texas, the TCEQ is working through several new issues:

- The Governor's Drought Proclamation suspended all rules and regulations that may inhibit or prevent prompt response. The proclamation allows the TCEQ discretion to streamline permitting and use enforcement.
- The TCEQ had never managed senior municipal or domestic and livestock calls in non-watermaster areas or multiple

concurrent priority calls in more than one river basin.

- The TCEQ had never worked with power plants in managing lake levels and temperatures.
- Due to concerns about public health and safety, in some cases the TCEQ did not suspend some junior municipal or power-generation water rights and adjusted others. The TCEQ worked with the U.S. Army Corps of Engineers to coordinate releases from Lake Whitney.

It is unclear how long drought conditions may persist or when they will occur again. Experience gained from drought impacts will allow the TCEQ to enhance its ability to respond more efficiently and effectively when water supplies are again drained by drought.

Watermaster Programs in Drought

TCEQ watermaster offices provide important agency resources during drought conditions. The TCEQ's watermaster programs actively manage water in the Rio Grande and Concho river basins by monitoring stream flows, reservoir levels, and water use, and by coordinating diversions in the basins under their jurisdictions.

Watermasters have the authority to allocate available surface water in accordance with the priority doctrine from the Texas Water Code, which states: "As between appropriators, the first in time is the first in right." One exception is that water rights in the Rio Grande below Lake Amistad are prioritized by type of use, with municipal use having the highest priority. With detailed knowledge of water-right permits in relation to each other, watermasters are equipped to negotiate surface water use to minimize negative impacts to all water-right holders they serve. The ability to directly manage available surface water on a daily basis reduces the potential for curtailments of non-municipal uses in the Rio Grande below Lake Amistad and for curtailments resulting from a priority call under the priority doctrine in the two other watermaster areas and in the upper Rio Grande, above Lake Amistad. The authority provided to watermasters by the Texas Water Code allows them

to manage the dynamic surface water resources in a way that protects senior and superior rights, while balancing the needs of all water-right holders.

Non-Watermaster Areas in Drought

In the areas of the state outside the jurisdiction of a watermaster program, the TCEQ is still responsible for the protection of senior and superior water rights. Agency actions in these areas have historically been more reactionary than those that are in a watermaster program. Without the dedicated staff of a watermaster program, the TCEQ must shift field resources during critical drought periods in order to respond effectively to drought impacts. From the summer of 2009 through 2013, the TCEQ temporarily realigned agency resources by establishing a dedicated group of TCEQ regional investigators specifically trained to provide immediate response to water-right complaints and to conduct compliance investigations as a result of the drought.

The TCEQ has worked across the agency to develop a new process that established a Drought Response Task Force to respond to priority calls. The goal is to respond within 10 calendar days, with programs across the TCEQ working concurrently on the major elements, including technical analysis, legal review, and field investigations. This new task force is a subgroup of the well-established agency-wide drought team.

The agency has also developed an active surface water management process for areas outside a watermaster program. In an effort to improve responsiveness to potential impacts to surface water availability and to provide information critical for the agency's evaluation and determination of priority calls in areas of the state outside the jurisdiction of a watermaster program, the TCEQ conducts activities to promote more active water management. The TCEQ active water management activities conducted in response to the priority calls received in 2013 included staff from five regional offices within the Brazos River Basin and two regional offices within the Colorado River Basin. To accomplish this goal, the TCEQ uses existing resources by acknowledging a connection between

regional surface water quality monitoring and field observations to provide data necessary to address surface water availability.

The key to successful active water management in the absence of a watermaster program is timely and accurate communication among multiple programs across the agency. By coordinating and communicating data currently captured from other water quality activities and field observations, the agency can more efficiently address water-right issues while minimizing impacts to resources required for continued success in meeting commitments and performance measures.

Public Water Supplies

Emergency Drinking Water Task Force

The TCEQ coordinates emergency assistance to public water systems (PWSs) with other state agencies on a weekly basis through the Emergency Drinking Water Task Force, which was created in October 2011 to assist PWSs that may have less than a 180-day supply of water remaining. The task force works together to provide technical assistance, identify alternative water sources, and identify funding sources for drought-stricken systems. Members of the task force include the TCEQ, the Texas Division of Emergency Management, the Texas Water Development Board, the Texas Department of Agriculture, and other state agencies (as needed).

The TCEQ intensively monitors a targeted list of public water systems that have reported that they have 180 days or less of water supply remaining. Additionally, the TCEQ maintains and intensely monitors a "watch list" of systems that have experienced water supply challenges. Once these drought-stricken systems have been identified, the TCEQ monitors the public water systems and provides targeted outreach and assistance for those systems experiencing critical conditions due to persistent drought conditions. During the current drought, many assistance visits by task force members have been made to drought-affected systems on issues such as alternative source evaluation and planning to avoid supply outages.

Financial, Managerial, and Technical Assistance

In addition to the Emergency Drinking Task Force technical assistance, TCEQ also provides free financial, managerial, and technical (FMT) assistance to public water systems to help them strengthen their operations. FMT assignments have historically addressed a wide range of water system issues including rates, board training, funding, restructuring, consolidations, and direct assistance modules (DAMS) to help PWSs with specific treatment issues.

As a result of drought, the TCEQ increased assignments in fiscal 2012 to help public water systems investigate alternate water sources, implement drought contingency and water conservation plans, and address water loss. The number of assignments decreased slightly in 2013 because of the aggressive assistance provided in 2012, as detailed below:

- FY 2012: 75 drought-related FMT assistance assignments
- FY 2013: 40 drought-related FMT assistance assignments

Funding Opportunities

The TCEQ is a member of the Texas Water Infrastructure Coordination Committee (TWICC), which is an umbrella organization that provides a list of funding options for water and wastewater systems. The TCEQ works closely with the TWICC to identify potential sources of funding for drought-stricken systems based on their particular needs.

Expedited Project Reviews

The TCEQ provides targeted assistance to public water systems by expediting reviews for plans and specifications, the drilling of additional wells, surface water intakes to deeper waters, and interconnections with adjacent water systems, all without compromising the drinking-water quality and capacity needs for other systems. Technical assistance is prioritized for “at risk,” drought-affected public water systems seeking alternative water sources and regional water planning through interconnection with other systems. The number of drought-related expedited reviews for plans and

specifications and for exceptions during calendar years 2011–2013 are as follows:

- 2011: 59 (49 plan reviews; 10 exception reviews)
- 2012: 57 (47 plan reviews; 10 exception reviews)
- 2013: 129 (111 plan reviews; 18 exception reviews)

In 2013, the number of expedited reviews more than doubled.

The TCEQ has worked with public water systems in approving innovative technologies such as direct potable reuse (DPR) and desalination of brackish groundwater. The TCEQ has developed a new desalination process for reverse osmosis (RO) membranes where the water system can submit a computer model instead of conducting a pilot study for the treatment of brackish groundwater with no exceedances of health-based primary contaminant levels. The fact that the computer-model review and the plan review can be performed concurrently without a pilot study will streamline the process for brackish groundwater treatment using RO.

When a PWS wants to utilize an alternate treatment procedure, it may submit a request for review. The TCEQ assists PWSs in reviewing pilot-study protocols to ensure that the studies gather the data needed to demonstrate that a new technology can successfully treat to applicable federal or state drinking-water standards and does not create a public-health risk. For example, PWSs are trying to limit their water loss during times of drought; as such, they may request to flush their dead-end mains less frequently. The Water Supply Division reviewed and approved an innovative dead-end main monitoring and flushing program that allowed some PWSs to reduce the amount of water used.

Conservation and Planning

In a telephone and letter campaign, the TCEQ used automated telephone messaging and sent 6,700 letters to approximately 4,600 community PWSs in Texas. The purpose of the campaign was to encourage PWSs to update their water-use restrictions under their drought contingency plans. In addition, the PWSs were informed of the effective date of Sept. 1, 2013, for House Bill (HB) 252, from the 83rd Legislative

Session, which requires water utilities to determine the number of days of water supply available for them to use and report to the TCEQ when their available water supply falls below 180 days.

Reuse

As drought conditions persist, conservation of water resources continues to be an important focus. With water resources declining, regulated entities are considering new and innovative ways to stretch available resources. The TCEQ has seen an increase in municipalities and industries looking to reuse wastewater.

Water Availability

Water Rights Permitting

State water is held in trust for the people of Texas and the TCEQ administers the permitting of state water. The Water Rights Permitting program issues new perpetual and temporary water rights permits, amends existing permits, processes changes of ownership, and helps administer priority calls.

Water-Rights Permits and Amendments

The diversion, use, and storage of state water require authorization, unless the water is being used for one of several specific exempt uses. The most common exemptions are for domestic and livestock purposes. Additionally, the reuse of water, the transfer of water to another basin, or the use of the bed and banks of a watercourse require permitting. Water rights that have previously been issued may be amended to change the existing authorizations. Common examples of these changes include changing or adding diversion locations, changing or adding a use, and changing the place of use for the water. The TCEQ processes water-rights applications under the Texas Water Code and TCEQ rules.

Change of Ownership to a Water Right

Perpetual water rights may be bought, sold, or leased. As of March 2014, the TCEQ was

processing approximately 650 applications for a change of ownership to a water right. This number has increased substantially since 2011, due to investigations related to water-rights priority calls.

Environmental Flows

Senate Bill (SB) 3 (80th Legislative Session) created the current process for establishing environmental flows. An environmental flow is an amount of water to leave in a stream or river for the benefit of the environment of the river and bay and estuary, while balancing human needs.

The bill established the Environmental Flows Advisory Group to oversee implementation. To assist the advisory group with the implementation of certain provisions, the bill established an Environmental Flows Science Advisory Committee, which in part serves as an objective scientific body to advise and make recommendations to the advisory group on issues relating to the science of environmental flow protection and develop recommendations for direction, coordination, and consistency for the advisory group, the local bay and basin groups, and the TCEQ. The bill requires the TCEQ to adopt recommendations in the form of environmental flow standards to be used in the decision-making process for new (and amended) water-right applications.

The TCEQ is responsible for coordinating with the advisory group, the Science Advisory Committee, and stakeholder committees; generating reports regarding the group's recommendations; providing administrative and technical assistance; and ultimately implementing the recommendations in the form of rules.

The TCEQ adopted rules for the first set of basins in April 2011. Rules for the last set of basins identified in the statute were adopted in February 2014.

Watermaster Programs

The TCEQ currently has three watermaster programs:

- The Rio Grande, which serves the Rio Grande Basin below Fort Quitman and coordinates releases from the Amistad and Falcon reservoir system.

- The South Texas, which serves the Nueces, San Antonio, and Guadalupe river basins, as well as the adjacent coastal basins.
- The Concho River, which serves the Concho River segment of the Colorado River Basin.

The watermaster programs are responsible for allocating, monitoring, and controlling the use of surface water in the divisions under their jurisdictions. Staff in these programs are dedicated to monitoring stream flows and pumping operations on a daily basis. Staff also provide technical assistance to water users and interested parties by responding to water-right inquiries, helping water-right owners install stream-flow markers when necessary, or providing information about the number of water rights authorized along a stream. This daily oversight allows the staff to anticipate problems, thus enabling local users to develop regional responses before surface water availability issues become severe. Since watermaster staff are located in regional or field offices, they are able to closely coordinate with water-right holders.

Watermaster Program Evaluations

As part of the TCEQ Sunset legislation from the 82nd Legislative Session, Section 5.05 of HB 2694 requires that every five years the TCEQ conduct an evaluation of all the river basins that do not have a watermaster program, to determine whether a watermaster should be appointed. The executive director must report the findings of this evaluation and make recommendations to the commission. The agency's findings and recommendations must be included in the agency's Biennial Report to the Legislature.

The first five-year evaluation cycle began in 2012. During that year, the TCEQ evaluated the Brazos and Colorado basins, including the Brazos-Colorado and Colorado-Lavaca coastal basins, but did not establish a watermaster based on that evaluation. In January 2013, the TCEQ received a petition to appoint a watermaster in the Brazos River Basin.

In 2013, the TCEQ evaluated the Trinity and San Jacinto river basins, as well as the Trinity–San Jacinto and San Jacinto–Brazos coastal basins. The TCEQ did

not establish watermaster programs in these basins as a result of those reviews. During 2014, the TCEQ is evaluating the Sabine River Basin, the Neches River Basin, and the Neches-Trinity Coastal Basin. Other river basins will be evaluated as follows:

Year 4 (2015)

- Canadian River Basin
- Red River Basin

Year 5 (2016)

- Sulphur River Basin
- Cypress Creek River Basin

Beginning in 2017, the TCEQ will begin the next five-year cycle of evaluations to determine whether a watermaster should be appointed.

International Treaties and River Compacts

The operations of two international waters treaties between the United States and Mexico, the 1906 convention and the 1944 treaty, affect the water supplies available to Texas water users along the Rio Grande. Texas water users in this area rely on compliance with these agreements to be able to provide the critical water supplies for municipal, agricultural, industrial, mining, and other uses. Compliance with these agreements continues to be an ongoing issue. Mexico consistently fails to meet its treaty obligations on the Rio Grande pursuant to the 1944 treaty.

Texas is a party to five interstate compacts: the Canadian, Pecos, Red, Rio Grande, and Sabine rivers. Interstate compacts provide a legal foundation for the equitable division of the water of an interstate stream with the intent of settling each state's claim to the water. Extremely significant issues have arisen regarding New Mexico's water use associated with the Rio Grande Compact. The State of New Mexico has filed litigation in the U.S. District Court of New Mexico, which if upheld would affect Texas' water supplies under the compact. Compact violations are resolved at the U.S. Supreme Court level. In January 2013, Texas filed litigation in the supreme court to protect its rights

under the Rio Grande Compact. Upon Texas filing the lawsuit in the supreme court, the U. S. District Court in New Mexico stayed New Mexico’s lawsuit. Texas’ action in the supreme court is the result of New Mexico’s actions (increased water use) that are depleting Texas’ water supplies provided by the Rio Grande Compact.

Subsequent to Texas filing, the supreme court asked the United States to express its views on Texas’ filing. In December 2013, the United States responded with a brief very favorable to Texas. In January 2014, the supreme court accepted the case. In February 2014, the United States filed a motion to intervene in the case to join Texas as a plaintiff. Texas continues to prepare historical, technical, and legal documents to support our case. As it has before, Texas will protect our water rights and entitlements under the compacts.

Groundwater Protection and Management

State Groundwater Protection Strategy

Texas Water Code, Section 26.405, requires the Texas Groundwater Protection Committee (TGPC) to develop and update a comprehensive state groundwater protection strategy that provides guidelines for the prevention of contamination, the conservation of groundwater, and the coordination of the groundwater protection activities of the state agencies. The Texas Groundwater Protection Strategy was developed in 1988, and was most recently updated in 2003. Many of the short- and medium-term goals set in the 2003 strategy—such as digitizing water-well driller reports and developing outreach materials and programs to educate domestic and private well owners about drinking water quality and potential health risks—have been achieved.

While there are no statutory mandates for how often the strategy must be updated, the 2003 strategy did set forth the goal of reviewing and updating the strategy every six years. The 2003 strategy has been under review by the TGPC and will be updated in 2014. The TCEQ will be responsible for preparing and supporting efforts to implement this document.

Priority Groundwater Management Areas

The TCEQ is also responsible for delineating and designating priority groundwater management areas (PGMAs) and creating groundwater conservation districts (GCDs) in response to landowner petitions or through the PGMA process. New PGMA studies may be undertaken over the next several years to determine if any of the areas of the state without GCDs have or will have critical groundwater problems in the next 50-year planning cycle. The TCEQ has taken actions to add one PGMA to an existing GCD, and is currently tracking and pursuing GCD creation in the other PGMAs. The TCEQ and the Texas Water Development Board (TWDB) will prepare and submit to the 84th Texas Legislature a report on the creation of new GCDs, the status and result of actions in the PGMAs, GCD management planning, and agency-required interactions.

Groundwater Management

GCDs are the state’s preferred method of groundwater management, and each district is governed by a locally selected board of directors. The three primary GCD responsibilities are permitting water wells, developing a management plan, and adopting the rules necessary to implement the management plan. By quantifying and evaluating the groundwater resource on an ongoing basis, GCDs help groundwater users to understand the aquifer, the combined demands on the aquifer, and the need for conservation of the aquifer for future generations.

A GCD uses the aquifer data and public dialog to develop a plan to manage and conserve the groundwater resources. A locally developed GCD management plan outlines goals to conserve and protect the groundwater resources within the aquifers. A GCD implements rules and programs to achieve the plan’s goals through their monitoring, registration and permitting, and educational-outreach program activities.

A GCD management plan and the “desired future conditions” for a groundwater management area (GMA) are dynamic and must be readopted and

approved at least once every five years. In 2010, the state’s GCDs completed the first round of the GMA planning process to adopt desired future conditions for their groundwater resources. The TWDB has provided the estimates of “modeled available groundwater” to the GCDs for inclusion in their next management plan and to the regional water planning groups for inclusion in their 2016 plans. The 83rd Legislature set a May 2016 deadline for the next round of GMA planning. The TCEQ actively monitors and ensures GCD compliance to meet management-plan adoption and re-adoption requirements. The TCEQ also takes action when the state auditor determines that a GCD is not operational in achieving the objectives of its management plan, and responds to petitions for inquiry of a GCD.

Public Water Supply

Safe, reliable drinking water is essential to the protection of public health. The TCEQ is the primary state agency authorized to enforce the federal Safe Drinking Water Act (SDWA). To retain primary enforcement authority (primacy), the TCEQ implements the Public Water Supply Supervision (PWSS) Program through oversight of public water systems. The TCEQ regulates approximately 7,000 public water systems that provide drinking water to approximately 25,000,000 Texas citizens.

Through the PWSS Program, the TCEQ:

- Provides training and technical assistance to ensure that water systems provide their customers with water that meets the health-based drinking water quality standards.
- Oversees the production, treatment, quality and delivery of drinking water for the public.
- Provides sample collection services for chemical contaminants to determine compliance with national drinking-water standards.
- Maintains inventory data of PWSs.
- Implements the Texas Source Water Assessment and Protection Program, which includes an assessment of potential contamination of water sources.
- Evaluates innovative and non-standard treatment technologies for PWSs.
- Oversees the Texas Optimization Program.
- Ensures that all community PWSs send their customers an annual report of drinking-water quality, also known as a consumer confidence report.
- Conducts investigations and administers enforcement to promote compliance with environmental laws and regulations.

Texas’ drinking-water systems face a wide array of challenges in meeting public health protection standards. The TCEQ also provides compliance assistance to all public water systems and establishes capacity-development programs to improve financial, managerial, and technical expertise.

Enforcement Response Policy and Enforcement Targeting Tool

In January 2011, the EPA implemented a new compliance strategy under the SDWA for public water systems. The TCEQ was required, as the primacy agency, to adopt the EPA’s new approach for enforcement targeting. This new approach is designed to identify public water systems with violations that rise to the level of significant non-compliance by focusing on those systems with health-based violations and those that show a history of violations across multiple rules.

The new approach includes a revised Enforcement Response Policy (ERP) and uses an Enforcement Targeting Tool (ETT) that enables the prioritization of public water systems by assigning each violation a “weight,” or a number of points, based on the assigned threat to public health. Points for each violation at a public water system are added together to provide a total score for that public water system. The ETT will evaluate and rank public water systems’ non-compliance across all drinking-water rules related to federally regulated contaminants. Any unaddressed violations with a score greater than or equal to 11 points will require the TCEQ to take formal enforcement action within six months of the ranking. If compliance is not achieved, the TCEQ will issue a formal enforceable action to return such systems to compliance.

Surveys and Investigations by the Office of Compliance and Enforcement

The TCEQ also conducts routine investigations (also known as sanitary surveys) as well as on-demand, on-site investigations of all public water systems in the state. The TCEQ utilizes a variety of investigation types—including comprehensive, focused, and reconnaissance—to maximize its presence in the field. It also devotes considerable resources to enhancing the agency’s already strong focus on compliance and technical assistance. When violations are identified during a PWS compliance investigation, staff apply the TCEQ’s Enforcement Initiation Criteria to ensure that the proper enforcement is applied to the appropriate rules and regulations. The TCEQ also processes formal enforcement actions for PWS facilities that fail to comply with rules and regulations.

Capacity Development (also known as Financial, Managerial, and Technical Assistance)

The TCEQ’s capacity-development program is designed to focus available resources to help public drinking water systems maintain or achieve compliance with public health protection standards by acquiring and developing financial, managerial, and technical capability. The principal objectives of the program are to help new and existing systems remain viable, and to help non-viable systems restructure.

Texas Optimization Program

The goal of the cross-organizational Texas Optimization Program (TOP) is to reduce public-health risk by improving the ability of PWSs to produce and distribute safe drinking water. The multifaceted program includes activities designed to:

- Identify and address problems at plants that have elevated public-health risk.
- Improve the technical knowledge and capabilities of water system operators.
- Facilitate the development of an effective optimization program.

To accomplish its goals and objectives, the TOP engages in a number of specific activities:

- Conducts special performance evaluations at plants that have problems with their performance, operational practices, or designs.
- Conducts mandatory comprehensive performance evaluations (mCPEs) at plants that fail to meet minimum performance standards.
- Helps plants implement the corrective action plan that is developed following an mCPE.
- Assists the Occupational Licensing Program by reviewing the course manuals used to teach mandatory water operator training courses.
- Develops directed-assistance modules that may be used to teach intermediate-level operational principles to water operators.
- Participates in the EPA Region 6 Area-Wide Optimization Program designed to facilitate information-sharing between state optimization programs.

Innovative Water Treatment Exceptions

The TCEQ oversees the review of all engineered plans related to PWSs to ensure that the plans adhere to the specific state design requirements under Title 30, Texas Administrative Code (30 TAC), Chapter 290. Innovative technologies are not included in the state design criteria and require exceptions to 30 TAC 290. Examples of innovative treatment strategies include:

- Use of chloramines (combined chlorine) instead of free chlorine as a distribution disinfectant.
- Membrane filtration for the removal of pathogens, as indicated by turbidity.
- Granular activated carbon filtration for the removal of organic contaminants.
- Ion exchange for the removal of inorganic contaminants.
- Direct or indirect reuse of wastewater as a source for a PWS.

These exception requests are reviewed and approved where the data clearly establishes that the

innovative treatment will maintain drinking water quality. In order to determine their effectiveness, the TCEQ requires and reviews data from pilot plant studies for both safety and adequacy. The TCEQ assists PWSs in developing their pilot-study protocol to gather the data that is needed to ensure a successful treatment strategy.

Water Quality Management

Water quality management includes the development of water quality standards, monitoring, assessment, permitting, and restoration activities. Water quality planning programs in Texas recognize the need for keeping the state’s water resources safe for drinking, swimming, fishing, aquatic life, and other beneficial uses. It is a complex effort that requires collaboration among numerous parties. The large geographic expanse of the state, increasing demands on the state’s water resources, changing federal policies, and new technical issues require that state water quality planning programs evolve to meet new challenges.

The TCEQ water quality planning programs have responded to these challenges by developing new approaches to addressing water quality issues in the state. Watershed Action Planning (WAP) is an approach that integrates priorities while emphasizing the role of partners and stakeholders at the basin and watershed levels. It relies on sound technical information and coordinated internal and external planning to make multiple options available, which provides the flexibility needed to address varied conditions. The WAP process provides for planning, coordinating, and tracking actions taken to execute a watershed management strategy.

Through the WAP process, recommendations for addressing water quality issues are developed for impaired and special-interest water bodies. Information on the water bodies, the recommended actions, and the lead entity for the actions is maintained in a database. The ultimate goal of the WAP process is to achieve restoration of designated uses in impaired water bodies.

Water Quality Standards and Implementation Procedures

Revisions to the Water Quality Standards

The Texas Surface Water Quality Standards (30 TAC 307) are the foundation for managing surface water quality by establishing water quality goals for the streams, rivers, reservoirs, and bays of Texas. The standards provide the basis for:

- Setting treatment levels for permitted wastewater discharges.
- Evaluating monitoring data to determine if water quality is being maintained.
- Establishing water quality targets to set total maximum daily loads of pollutants.

The TCEQ adopted revisions to the Water Quality Standards on Feb. 12, 2014. These included a new category of contact recreation, primary contact recreation; the addition of a definition of “industrial cooling water area”; numerous site-specific standards based on use-attainability analyses; and revised toxic criteria. The TCEQ will continue to develop water quality goals for the state, conduct triennial reviews of water quality standards, and revise as needed.

The TCEQ plans to publicly revise the water quality standards approximately every three years to:

- Incorporate better information on the effects of potential pollutants.
- Improve standards for specific water bodies based on new studies.
- Address changes in state and federal requirements.
- Improve the framework for water quality management.

The TCEQ is developing additional site-specific and statewide criteria for the protection of aquatic life and human health during the next revision of the water quality standards. The TCEQ is updating its Nutrient Criteria Development Plan and will continue to improve the strategies it employs to assess and manage nutrients in Texas water bodies.

Revisions to the Implementation Procedures

Revisions to the *Procedures to Implement the Texas Surface Water Quality Standards* were approved by the commissioners on June 30, 2010. The revised implementation procedures must be approved by the EPA before the TCEQ can use them for wastewater permitting. On Dec. 2, 2010, the EPA denied approval of the 2010 implementation procedures due to concerns with sections dealing with whole effluent toxicity, dechlorination requirements for minor domestic wastewater treatment facilities, and temporary variances to water quality standards. In a July 12, 2013, letter, the EPA clarified that the 2010 implementation procedures, excluding the three previously-mentioned sections, have been approved for use in wastewater permitting. The TCEQ continues to work with the EPA to resolve the remaining issues of concern.

Water Quality Monitoring

Coordinated Monitoring Network

The TCEQ directs a surface water quality monitoring network involving approximately 1,800 monitoring sites in the state's streams, rivers, reservoirs, bays, and estuaries. The sampling is conducted by TCEQ regional staff, Clean Rivers Program partners, and other local organizations. Monitoring groups meet annually to plan and develop a comprehensive monitoring schedule that supports various statewide and basin objectives. The monitoring schedule ensures adequate coverage to support water quality management activities. Key activities for future planning include:

- Gathering more knowledge of local environmental factors to better define water quality issues.
- Leveraging the resources and expertise of more water-monitoring programs to help maximize limited resources.
- Identifying long-term monitoring sites for analyzing trends.
- Participating in the Watershed Action Planning process for developing various water quality strategies.

Continuous Water Quality Monitoring

The TCEQ has developed a Continuous Water Quality Monitoring Network (CWQMN) to measure water quality with greater frequency than is possible with the routine monitoring network. The TCEQ deploys CWQMN sites where there are data needs that can be met with continuous monitoring using available technology. CWQMN data can be appropriate for a variety of uses involving the characterization of baseline conditions, water resource management decisions, water quality trends, Total Maximum Daily Load implementation, public information, etc. The network includes approximately 65 sites in fiscal 2014. Annual reviews of CWQM sites include evaluations of:

- data needs
- available monitoring technology
- available funding
- availability of operators
- site constraints

Sites may be added, deleted, or modified during each of the next five years. The TCEQ will also review existing procedures, practices, and instrumentation to improve data quality and data return from CWQMN sites.

Integrated Report

The Integrated Report (also known as the Texas Water Quality Inventory and 303(d) List) summarizes the data-collection activities of the agency and its partner entities. This water quality report is submitted to the EPA in even-numbered years, as required by the Clean Water Act (CWA). The purpose of the report is to provide information on the condition of surface water quality throughout Texas as compared to the Texas Surface Water Quality Standards.

The report identifies specific water bodies in need of remedial activities that may necessitate the development of a TMDL or watershed protection plan, changes to wastewater permits, or revisions to water quality standards. This information is also used to direct sampling resources and identify data needs for future assessments. Recent reports have been developed using advanced technological tools for receiving,

compiling, analyzing, and reporting data. These tools will be further developed over the next five years to increase efficiencies and improve the overall process. The next report is scheduled to be submitted in 2014. In the next five years, reports will be submitted in both 2016 and 2018.

Addressing Water Quality Impairments

The Integrated Report is the tool the agency uses to identify impairments. Once identified, the agency has four primary approaches that may be taken to address an impaired water body:

- use-attainability analysis
- special studies
- Watershed Protection Plans (WPPs)
- Total Maximum Daily Loads (TMDLs)

Work conducted under each of these approaches may be done by several entities. The TCEQ is the lead agency for point-source pollution and nonagricultural nonpoint-source pollution. The Texas State Soil and Water Conservation Board (TSSWCB) is the lead agency for nonpoint-source pollution resulting from agricultural and forestry operations. Frequent coordination occurs between the TSSWCB and the TCEQ programs to identify projects, coordinate resources, and avoid duplication of effort.

Use-Attainability Analysis

A use-attainability analysis (UAA) is a scientific assessment of the physical, chemical, and biological characteristics of a water body. It is conducted to determine existing and attainable uses. UAAs are often used to re-evaluate designated or presumed uses when the existing standards appear to be inappropriate for water bodies that are listed as impaired. UAAs may be conducted by the TCEQ's Water Quality Planning Division. The TSSWCB conducts UAAs primarily in areas affected by agriculture and silviculture.

Special Studies

Special studies can encompass a variety of projects that may be used to address impaired waters. These are typically conducted to gather additional information

regarding the cause of a water body impairment in an area where unique or complex factors exist.

Watershed Protection Plans

Watershed Protection Plans (WPPs) are plans used to protect and/or restore water bodies by characterizing pollution sources, establishing water quality-based pollution-control targets, and identifying the programs and practices that will be used to achieve the targets. WPPs are conducted through the Nonpoint Source (NPS) Program, which in Texas is administered by both the TCEQ and TSSWCB. The TCEQ and TSSWCB provide NPS 319(h) grants to local stakeholder groups for the development of the WPPs. While the TCEQ and TSSWCB administer the program, the WPP document may be developed by a variety of local groups, such as river authorities, councils of governments, or stakeholder groups.

Total Maximum Daily Loads

Where current control actions or pollution prevention strategies are not sufficient to attain water quality standards, the state takes action to restore some impaired segments through the Total Maximum Daily Load (TMDL) Program. A TMDL determines the maximum amount of a pollutant that a water body can receive and still maintain its identified uses. A TMDL allocates the load to regulated and unregulated sources in the watershed. TMDLs are conducted by the TMDL Program in the Water Quality Planning Division. An Implementation Plan (I-Plan) is developed for each TMDL to identify the management measures necessary to achieve the pollutant reductions identified in the TMDL. Stakeholder involvement is essential in the development of both the TMDL and the I-Plan.

Coordination of Water Quality Studies

Staff of the TCEQ and other local, regional, state, and federal agencies coordinate closely and plan the water quality sampling studies of each agency, in order to efficiently address multiple sampling goals, avoid duplication of efforts, and share information. We will continue to notify and seek input from external stakeholders

regarding TCEQ water quality studies, in order to increase public awareness and to obtain local information on the characteristics of individual water bodies.

Bacteria Listings

Elevated bacteria concentrations that exceed the contact recreation standards continue to be the dominant water quality issue affecting water bodies. Newly identified bacteria-impaired water bodies may require a recreational use attainability analysis to establish the appropriate use under the most recently approved water quality standards. TCEQ programs will work together to complete these studies. Bacteria TMDLs have been conducted or completed in most urban areas of the state. Over the next five years, many new bacteria impairments in urban areas will be within existing TMDL watersheds. The TMDL Program will add these new impaired segments to existing TMDLs through updates to the State Water Quality Management Plan.

Nonpoint Source Program

Congress enacted Section 319 of the federal Clean Water Act (CWA) in 1987, establishing a national program to control nonpoint sources of water pollution. Section 319(h) sets forth the guidelines for state nonpoint source (NPS) pollution control requirements. Since 1990, Congress has annually appropriated grant funds to states under Section 319(h) to help implement NPS pollution management programs.

The Texas Nonpoint Source (NPS) Program implements Section 319 of the CWA. The state NPS program is a shared responsibility between the TCEQ and the Texas State Soil and Water Conservation Board (TSSWCB). The TSSWCB is the lead agency in the state for addressing NPS pollution resulting from agricultural and silvicultural activities. The TCEQ NPS program is the lead for addressing other categories of NPS pollution, including urban runoff. The two agencies coordinate their program responsibilities through formal agreements, the preparation of statewide program documents, the development of watershed-based plans, and routine interagency meetings and correspondence.

Coastal Related Activities

The Coastal Nonpoint Source Pollution Control Program was established by the U.S. Congress in 1990 and is jointly administered by the National Oceanic and Atmospheric Administration and the EPA. The program establishes a set of management measures for states to use in controlling polluted runoff. The measures are designed to control runoff from six main sources: (1) forestry, (2) agriculture, (3) urban areas, (4) marinas, (5) hydromodification (shoreline and stream channel modification), and (6) wetlands and vegetated shorelines, or riparian areas.

In July 2003, the State of Texas was granted conditional approval of its Texas Coastal Nonpoint Source Pollution Control Program. This program is actively working with the General Land Office to address the remaining “outstanding conditions” in order to gain full approval of the program.

The Galveston Bay Estuary Program (GBEP) and the Coastal Bend Bays and Estuaries Program (CBBEP) were created under Section 320 of the CWA to develop and implement comprehensive conservation management plans for their regions. These management plans—the Galveston Bay Plan and the Coastal Bend Bays Plan—were developed by stakeholders and approved in 1995 and 1998, respectively. The plans are being implemented in accordance with Texas Water Code, Subchapter N, sections 5.601–5.609. The stakeholders have the flexibility to choose their own approach for implementing the plans. The GBEP is managed by TCEQ staff as a program of the agency. The CBBEP is managed by a nonprofit entity established for that purpose and funded partially under a contract with the TCEQ.

Wastewater Permitting

The objective of the Wastewater Permitting Program is to protect the quality of the surface water and groundwater in Texas by regulating the types and amounts of pollutants introduced into those waters. The EPA delegated the issuance of National Discharge Pollutant Elimination System permits to the TCEQ. Under this federally delegated program, called the Texas Pollutant

Discharge Elimination System (TPDES), the TCEQ issues permits for facilities that discharge directly to surface water such as streams, rivers, lakes, reservoirs, bays, and estuaries. The TCEQ also issues Texas Land Application Permits (TLAP) under Texas Water Code, Section 26.121, to facilities that do not discharge to surface water but rather discharge wastewater via irrigation or land application of manure or sludge.

The Wastewater Permitting Program issues TPDES and TLAP authorizations under two general categories: individual authorizations and authorizations under statewide general permits. Currently, the TCEQ has issued an estimated 3,624 individual authorizations and 26,076 authorizations under a general permit. Timely issuance of wastewater authorizations and obstacles to achieving this goal continue to be issues of concern. Primary obstacles include reaching resolution between the TCEQ and the EPA on complex technical issues.

The TPDES program administered by the TCEQ has come under significant increased oversight and criticism by EPA Region 6. Regulated entities are experiencing significant delays in getting permits issued, which prevents new projects from moving forward. The Wastewater Permitting Program continues to work with the EPA to resolve issues without compromising the integrity of the TPDES program.

Waste Issues

The Office of Waste implements federal and state laws related to the regulation of aboveground and underground petroleum storage tanks (PSTs); the generation, treatment, storage, and disposal of municipal, industrial, low-level radioactive, and hazardous wastes; and the recovery and processing of uranium and the disposal of its by-product. The office also oversees the investigation and cleanup of sites contaminated by hazardous and non-hazardous pollutants.

Dry Cleaner Remediation Program

The TCEQ oversees the assessment and cleanup of former or operating dry cleaner facilities. The Dry

Cleaner Remediation Program (DCRP) uses state contractors to clean up the sites. There are currently four assessment contractors and two engineering contractors being used to address the sites in the program.

The Texas Legislature established the Dry Cleaning Facility Release Fund in 2003 to regulate and remediate certain dry-cleaning facilities and provide the funding for implementation of the program. The program collects registration and solvent fees from solvent distributors, dry cleaner facilities, drop stations, current property owners, and previous property owners. These fees are used to administer the registration of facilities and to clean up sites. The program expires Sept. 1, 2021.

To be eligible for the DCRP, an applicant must be registered with the TCEQ and be one of the following: (1) the owner of the dry cleaner facility or drop station; (2) the property owner where the facility or drop station is (or was) located; or (3) the previous property owner with an agreement with the current property owner establishing responsibility for costs associated with the cleanup of contamination. Applicants must submit an application for site ranking that documents a release of dry cleaner solvent into the environment from a currently registered or former retail dry cleaner facility. The applicant must pay the first \$5,000 of the corrective-action costs incurred as a non-refundable deductible, and sign an affidavit stating that perchloroethylene will not be used at the site. Once corrective action has begun, perchloroethylene can no longer be used at that site. A deed notice prohibiting any future use of perchloroethylene at the site is required and must be filed in the county property records.

Since the program began in 2003, there have been 244 applications received and cleanup has been completed at 53 sites (as of February 2014). There are 174 sites in the program (90 active and 84 postponed). Approximately one new application is received each month.

For fiscal 2014, the appropriated budget for the DCRP was approximately \$3.3 million. The level of funding has affected new site assessments and cleanups at active sites.

Petroleum Storage Tank (PST) Program

The TCEQ oversees the assessment and cleanup of leaking petroleum storage tank (LPST) sites. Additionally, the TCEQ is responsible for the compliance and enforcement aspects of active and inactive PST sites.

PST cleanups are conducted either through the Responsible Party (RP) Lead Program or through the State Lead Program. Under the State Lead Program, the TCEQ conducts the cleanups using state contractors in situations where the owner or operator cannot be found or is unwilling or unable to pursue cleanup, pursuant to Texas Water Code (TWC) 26.351, or in situations in which a site transferred to State Lead at the end of the PST Reimbursement Program, pursuant to TWC 26.3573(r-1).

The Texas Legislature established the Petroleum Storage Tank Remediation (PSTR) account in 1989, to assist owners and operators of LPSTs and to provide a bulk delivery fee to finance the program. The TCEQ Sunset legislation, HB 2694, 82nd Legislature, directed the agency to set the fee in an amount not to exceed the amount necessary to cover the agency's costs for administering the program. To be eligible for reimbursement, releases had to be reported by Dec. 22, 1998, and cleanup activities had to be completed prior to Aug. 31, 2012. Throughout the duration of the reimbursement program, over \$1 billion was paid from the PST account for cleanup costs.

Reimbursement-eligible RPs that did not complete all corrective action by July 1, 2011, were able to request to have their site placed in the PST State Lead Program. Over 300 reimbursement-eligible sites were placed in the State Lead Program.

Since the program began in 1987, there have been 26,811 reported releases (as of February 2014). Of those, cleanup has been completed at 25,197 sites, and corrective action is under way at 1,614 sites. In addition, an average of 20 new releases are reported each month. Tank owners and operators are responsible for addressing new releases.

The PST State Lead Program is responsible for cleanup activities at approximately 415 sites, including

the eligible sites placed in the program, and the sites that cannot be addressed by a viable RP.

Adequate funding will continue to be necessary to meet the ongoing requirements of the PST State Lead Program and to continue the PST regulatory program, which helps ensure the prevention of future releases.

One requirement of the federal Energy Policy Act of 2005 is that underground storage tank (UST) facilities be inspected every three years. Texas has approximately 18,000 registered UST facilities, meaning that approximately 6,000 facilities must be investigated annually to meet the three-year inspection cycle. A third party was contracted to coordinate and perform investigations as directed by TCEQ staff with specific funding provided through grants awarded by the EPA.

The TCEQ began the three-year inspection cycle on Oct. 1, 2010, and ended on Sept. 30, 2013. In the first three-year cycle with federal funding, approximately 18,000 investigations were conducted and approved. The EPA has approved limited funding for fiscal 2014 and has informed the TCEQ that continued funding reductions are expected in the future. Therefore, the future sustainability of the Energy Act three-year inspection cycle is uncertain and will likely not be supported by federal funding.

Low-Level Radioactive Waste

The objective of the Radioactive Materials Program is to protect the public and workers from unnecessary radiation exposure and to protect the environment from contamination resulting from the possession, storage, or disposal of radioactive materials. Major activities performed under the Radioactive Materials Program are regulation, compliance and enforcement, and licensing of facilities storing, processing, or disposing of low-level radioactive waste.

Texas Health and Safety Code, Chapter 401, provides regulatory jurisdiction and facility ownership and custodial responsibilities to the TCEQ for the commercial disposal of low-level radioactive waste. Low-level radioactive waste (LLRW) has an exclusionary definition in law and rules, defined by what it is not. It does not include high-level radioactive waste,

spent nuclear fuel, by-product material, naturally occurring radioactive material (NORM), or oil and gas NORM waste. The program also issues licenses authorizing the storage and processing of other radioactive materials subject to TCEQ jurisdiction.

Texas' LLRW is produced predominantly by nuclear utilities, academic and medical research institutions, hospitals, and industry. LLRW typically consists of radioactively contaminated trash, such as paper, rags, plastic, glassware, syringes, protective clothing (gloves, coveralls), cardboard, packaging material, organic material, spent pharmaceuticals, and used (decayed) sealed radioactive sources. Nuclear power plants contribute the largest portion of LLRW in the form of contaminated ion exchange resins and filters, tools, clothing, and irradiated metals and other hardware. LLRW does not include waste from nuclear weapons manufacturing or from U.S. Navy nuclear propulsion systems. The Texas Compact, an agreement between Texas (as the host state) and Vermont (as the party state), provides for the management or disposal of LLRW pursuant to the Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 USC 2021b–2021j).

Senate Bill (SB) 347, 83rd Legislature, created the Environmental Radiation and Perpetual Care Account to fund efforts to ensure the protection of public health and safety and the environment with regard to radioactive substances.

SB 347 also directs the TCEQ to provide an updated study related to LLRW to the Legislature prior to the 85th Session. Texas law now requires the TCEQ to provide two separate studies:

- A study on Texas Compact waste and potentially imported nonparty waste projections, with recommendations, regarding impacts to the capacity of the Compact Waste Disposal Facility, the calculation of radioactive decay relating to radiation-dose assessments, the use of containers for waste, and public health and safety effects of the projected waste. A final report is due on Dec. 1, 2016.

- A study on surcharge revenue from imported nonparty waste, including a review of operational costs and expenses, and overall revenue. A final report is due on Dec. 1, 2016.

The TCEQ authorized commencement of operations at the Compact Waste Disposal Facility portion of the disposal site and the first waste shipment was received for disposal at the facility on April 27, 2012. The TCEQ authorized commencement of operations at the Federal Waste Disposal Facility portion of the disposal site and the first waste shipment was received for disposal at the facility on June 6, 2013. Since operations began at both sites, over 50,000 cubic feet of waste have been safely disposed of and over \$16 million in disposal fees have been collected as revenue for the state.

The TCEQ maintains two full-time resident inspectors at the WCS facility to inspect every load of LLRW brought into the Compact Waste Disposal Facility. Since opening the Compact Waste Disposal Facility, there have been 35 LLRW shipment inspections conducted in fiscal 2012; 121 LLRW shipment inspections conducted in fiscal 2013; and 72 LLRW shipment inspections conducted through March 18, 2014, for fiscal 2014.

Underground Injection Control Permits and Investigations

The TCEQ has primary enforcement authority for underground injection of fluids through Class I, III, IV, V, and a small subset of Class VI injection wells through program delegation from the EPA. The TCEQ Underground Injection Control (UIC) Program is administered by the UIC Permits Section in the Radioactive Materials Division (RMD) of the Office of Waste (OOW), and by multiple divisions within the Office of Compliance and Enforcement (OCE). The UIC Permits Section reviews, evaluates, and processes permit applications, and issues permits and authorizations accordingly. UIC Permits Section staff support the OCE on an as-needed basis, as requested for monitoring-, inspection-, compliance-, and investigation-related activities. OCE investigators

also review for compliance consistency of UIC permit applications or revisions. In 2013, the OCE reviewed 17 Class III and 43 Class I UIC permitting actions.

The OCE regional offices regularly conduct investigations at Class I UIC permitted wells. Mechanical Integrity Tests (MITs) of Class I wells are conducted by permittees on an annual basis and staff in the OCE regional offices conduct MIT investigations and MIT record reviews across the state. Seven of the Class I UIC permitted wells are located at in situ uranium-mining facilities and are used for the disposal of radioactive by-product material fluids (non-hazardous).

The OCE Critical Infrastructure Division (CID) conducts the investigations of Class III UIC wells at in situ uranium-mining facilities. The CID has developed an annual investigation frequency goal for Class III injection wells at in situ uranium facilities in accordance with Chapter 2801 of the U.S. Nuclear Regulatory Commission (NRC) Inspection Manual. During 2013, the CID conducted two Class III injection well related investigations. Investigation numbers were reduced in 2012 and 2013 due to the additional resource commitments involved in opening the LLRW disposal site and developing the LLRW Resident Inspector disposal investigation process.

Underground Injection Control Aquifer Exemptions

The TCEQ Underground Injection Control (UIC) Program's objective is to protect underground sources of drinking water (USDW) through the permitting of underground injection of fluids. The regulation of wells used for underground injection must maintain the quality of fresh water consistent with public health and welfare and the operation of existing industries supported by the use of underground injection. The TCEQ is responsible for the permitting of Class I, III, V, and a small subset of Class VI injection wells through program delegation from the EPA.

Class III UIC wells, which inject fluids for recovery of minerals (e.g., uranium, sulfur, and sodium sulfate), and a few Class V (miscellaneous) UIC wells may require both a TCEQ permit or authorization

and an aquifer exemption to allow for the injection activity into an USDW. To become effective, an aquifer exemption must be first granted by the TCEQ, and then the EPA must also approve a program revision to the TCEQ's UIC delegation, adding the newly exempted aquifer.

EPA Region 6 took more than four years to approve the most recently granted TCEQ-requested program revisions to expand an exempted aquifer at an existing uranium mine in Duval County, despite the successful issuance of the TCEQ-associated Class III permits and aquifer exemption order. Another TCEQ-requested program revision for an aquifer exemption at a new uranium mine in Goliad County required approximately 1.5 years for the EPA to review and approve. However, soon after approval, a formal petition was filed, and the EPA remanded the decision back to itself for further consideration. To date, the issue remains unresolved.

Although 36 such program revisions have been successfully made to the TCEQ's delegated UIC Program in the past, since 2010 there has been a definitive slowing of review and decision-making by the EPA on aquifer exemption related program requests by the TCEQ. The TCEQ submitted an aquifer exemption program request to the EPA in May 2013 for an expansion of an aquifer exemption at an existing uranium mine in Brooks County and has coordinated with the EPA to provide advanced information on an aquifer exemption expansion request for yet another existing uranium mine in Duval County. The EPA orally stated to the TCEQ that it will not consider these two most current requests for program revision until the remanded decision is resolved.

The resulting impasse for new aquifer exemptions has effectively stopped any new or expanded Class III in situ uranium-mining operations in Texas. This impasse will affect the projected growth of the uranium-mining industry in South Texas.

Superfund Program

The Texas Superfund Program is responsible for assessment, evaluation, remediation, and post-completion

activities at state and federal Superfund sites in Texas. The program also identifies and ranks sites contaminated with hazardous substances for potential entry into the state and federal Superfund programs. The Texas Superfund Program was created in 1985 by an amendment to the Solid Waste Disposal Act. Since then, 113 Superfund sites in Texas have been successfully remediated and no longer pose an imminent threat to public health and safety or the environment.

The number of Superfund sites in Texas remains fairly static. The Texas Superfund Program is addressing 113 active sites as of February 2014. These include sites undergoing active evaluation and cleanup, as well as sites in post-completion care. The agency is responsible for overseeing the long-term and sometimes indefinite operation of remedies put in place during the remedial-action phase of cleanup, either by state contractors or responsible parties. Post-completion activities may include maintenance of treatment systems and on-site waste containment, long-term groundwater monitoring, and general site security.

Of the 113 active Superfund sites in Texas, 53 are state-led sites and 60 are federal-led sites. Potential Superfund sites are identified through referrals from internal and external groups, including the TCEQ's Enforcement and Water Supply divisions, TCEQ regional offices, and the EPA. In fiscal 2013, the Superfund Program completed assessments at 71 potential sites, 20 of which were designated federal sites. In fiscal 2014, as of February, the program has completed assessments at 20 potential sites, 14 of which are federal sites. In general, the number of potential Superfund sites that require assessment remains fairly static. Currently, there are 715 potential Superfund sites that are waiting to be assessed.

For fiscal 2014, the appropriated remediation budget for the Texas Superfund Program was \$9.0 million. In addition, the program has been awarded a total of \$4.1 million in grant funding from the EPA and the Department of Energy for assessment, site inspection, and management-assistance activities to support the Federal Superfund Program during the fiscal years 2013 and 2014. Approximately \$3.3 million of the \$4.1 million has been received to date.

A portion of the program budget is used for immediate-response actions to address imminent threats to human health and the environment, as well as cost-sharing obligations with the EPA at federal Superfund sites. The remaining funds are allocated to cleanups, site discovery and assessment, and post-completion activities based on a prioritization strategy. Accordingly, remediation of lower-priority sites may be potentially delayed or phased over longer periods of time.

As the program continues and the discovery and cleanup of contaminated sites continues, additional sites will move into the post-completion phase, which may reduce the amount of money that is available for future discovery and cleanup activities.

Sham Recycling

Recycling and reuse minimize waste by putting materials back into products and reducing the consumption of raw materials. Legitimate recycling operations in Texas reduce the amount of waste being placed in landfills, which is both environmentally and economically beneficial. Types of recyclers include construction and demolition materials; electronics; single-stream residential (paper, plastics, metal); and composting and mulching.

Current statutes and regulations allow for certain types of recycling facilities to operate with limited TCEQ oversight. There is a desire to limit the regulatory burden in order to encourage the establishment and operation of recycling facilities. Statutes and regulations allow for certain types of recycling facilities operated by government entities, those affiliated with landfill operations, and those that do not receive any financial compensation to receive materials, to operate without notification to the TCEQ.

However, some level of oversight is needed to reduce the potential for and increase the identification of sham recycling operations. "Sham recycling" occurs when purported recycling operations derive most of their income from charges to accept material, with a disproportionately lesser amount of material actually being recycled and put to beneficial use. Such operations use the recycling claim to circumvent regulatory

requirements to obtain a permit or registration for storing or processing waste. Sham recycling operations pose fire hazards and create public-nuisance issues.

A number of sham recycling facilities appear to be receiving primarily construction and demolition material—including wood, sheetrock, and asphalt shingles—or brush from landscaping and land-clearing activities. If sham recycling facilities are abandoned, the state and local governments are left to address cleanup and, potentially, fire response. The waste-disposal industry and legitimate recycling operations have also expressed concern with the number of sham recyclers operating around the state. The TCEQ endeavors to provide clear direction regarding the regulatory requirements for recycling in an effort to reduce sham recycling operations.

Regional Solid Waste Grants Program

The State of Texas Regional Solid Waste Grants Program (RSWGP) is administered in the Office of Waste by the Waste Permits Division. The RSWGP was established under Texas Health and Safety Code (TH&SC), Section 361.014(b), to fund regional solid waste planning initiatives, to maintain 24 regional solid waste management plans and programs, and to establish and maintain an inventory of closed and abandoned landfills. The program is managed through grant contracts with the 24 regional planning commissions, also known as councils of governments (COGs). The COGs use the state pass-through grant funds to:

- maintain a Regional Solid Waste Plan
- maintain a solid waste advisory committee
- provide technical assistance to local governments
- conduct sub-grant pass-through solicitations, awards, and administration
- provide education, training, and outreach, and serve as resource centers for regional education and outreach materials
- conduct data collection and analysis
- maintain a closed-landfill inventory
- conduct reviews of municipal solid waste permit applications received by the agency for consistency with each respective regional plan

Eligible entities include cities, counties, COGs, public schools or public school districts, and other state-authorized districts or authorities with responsibility for solid waste and water quality planning.

The program operates on state fees and designated solid waste fee revenue, or “tipping fees,” as provided by TH&SC 361.013. Approximately 50 percent of each \$1.25/ton paid by a landfill for receipt of waste goes into the Solid Waste Disposal Fee Account, which collects about \$20 million per year. These monies are distributed to each of the 24 COGs based on a formula that takes into account population, geographic area, percentage of solid waste fee revenue generated within each region, and public-health needs.

Allowable project categories include:

- Local enforcement projects, which may include funding local code enforcement officers, illegal dumping signs, cameras, or enforcement vehicles.
- Litter and Illegal Dumping Cleanup and Community Collection Event projects, which may include cleanups of illegal dumping sites and river cleanups.
- Source Reduction and Recycling projects, which may include solid waste diversion or reduction, reduce, reuse, recycle, or re-buy projects.
- Household Hazardous Waste Management projects, which may include permanent collection facilities or events.
- Citizens’ Collection Stations or “Small” Registered Transfer Stations, which may include liquid waste transfer stations or recycling facilities.
- Education and Training projects, which may include public-service announcements and education and outreach materials.
- Technical studies, such as Regional Recycling Rate Benchmarking studies or local government Disaster Debris Management Plans.
- Local Solid Waste Management Plans.
- Other projects, which may include scrap-tire management or illegally dumped scrap tire removal and recycling.

The 82nd Texas Legislature (2011) reduced funding for the Regional Solid Waste Grants Program by

50 percent. For fiscal years 2014–2015, the COGs were allocated approximately \$5.5 million per fiscal year. Funding reduction will result in fewer dollars being passed through to local governments and fewer solid-waste services being provided by each COG.

Post-Closure Care beyond 30 Years

The federal regulations promulgated pursuant to the Resource Conservation and Recovery Act (RCRA) establish post-closure care (PCC) requirements for hazardous waste disposal units subject to the RCRA permitting requirements. The TCEQ regulations implementing the RCRA program in Texas also specify the same standards for PCC. Consistent with the federal regulations, TCEQ regulations specify a 30-year period for PCC monitoring during the initial authorization of the disposal unit under the RCRA. The federal and state regulations allow extension of the PCC period beyond the initial 30-year PCC period, if necessary, to protect human health and the environment. The permits issued by the TCEQ under the RCRA specify the standards for PCC, including maintenance and monitoring requirements to protect human health and the environment.

Texas has RCRA-permitted disposal units approaching the completion of the initially specified 30 years of PCC. TCEQ staff is evaluating the requirements and associated issues related to the extension of PCC for such units. The EPA has not finalized guidance or specified requirements for PCC after the initial 30-year period. The TCEQ is following developments on the issue, including steps taken by other states.

Water Balance Cover Project

The use of water balance (WB) covers (also referred to as evapotranspiration covers) has been proven to be a cost-effective final cover for municipal solid waste (MSW) landfills in certain areas. The TCEQ's Waste Permits Division is working with stakeholders to develop standard water balance (WB) cover designs that can be used as alternative final covers. The purpose of the standard WB cover designs is to provide landfill

operators an option of selecting a cover that can reasonably be expected to meet the TCEQ regulatory percolation requirements for certain areas without requiring the performance of site-specific computer modeling or extensive multi-year verification testing.

The project involves the delineation of seven geoclimatic zones within the state and computer modeling utilizing climate data and soil test data representative of each zone. The final report for the project is expected to be completed during the last quarter of fiscal 2014. Upon implementation, the new standard WB cover designs and the design tools developed as part of this project are expected to provide similar protection of human health and the environment as existing standards, while providing a streamlined application option and expedited TCEQ staff review. The project is industry-funded and includes a research grant to the University of North Carolina for technical expertise and assistance.

Management of Coal Combustion Residuals

Subsequent to an accident in Tennessee that resulted in releases of coal combustion residuals (CCRs), the EPA published a proposal in 2010 to regulate the management of CCRs. CCRs are considered nonhazardous industrial solid wastes by the EPA under the “Bevill Exclusion.” In line with this, CCRs are not considered as hazardous waste under Texas regulations and a permit is not required for on-site disposal of CCRs. The EPA's proposal provided two options:

- Option I (Subtitle C option) proposed to regulate CCRs as a “special waste” when destined for disposal, and to subject CCR surface impoundments and landfills to some of the hazardous waste regulations under the Subtitle C regulations of the Resource Conservation and Recovery Act (RCRA).
- Option II (Subtitle D option) proposed to retain the current “Bevill Exclusion” and regulate CCR landfills and surface impoundments by establishing national criteria in accordance with the Subtitle D regulations of the RCRA.

The TCEQ executive director provided comments on the EPA proposal and noted that existing TCEQ requirements are effective and encourage CCR recycling. These comments pointed out that subjecting CCRs to the hazardous waste regulations would negatively affect their beneficial use and that regulating CCRs under the Subtitle D option is preferred, should the EPA determine that federal regulation is necessary and appropriate. The EPA has recently agreed to issue a final CCR rule on Dec. 19, 2014, as part of a proposed lawsuit settlement with CCR recyclers, environmental groups, and other stakeholders.

The U.S. Congress has worked on providing statutory direction for the management of CCRs by introducing a number of bills, but none of them has been signed into law. If Texas has to implement a program as envisioned by some of the proposed bills (i.e., to authorize the on-site disposal of CCRs via permits), the Texas Solid Waste Disposal Act (SWDA) and TCEQ rules would have to be amended. The executive director does not have statutory authority under the Texas SWDA (Section 361.090) to permit the on-site disposal of nonhazardous industrial solid waste (i.e., discarded CCRs). The TCEQ's Waste Permits Division is tracking the status of the EPA proposed rule and legislative proposals associated with CCRs to evaluate their impact on the TCEQ's waste program.

New Municipal Solid Waste Type I Landfill Applications

The TCEQ's Waste Permits Division is experiencing an increase in the number of permit applications submitted to site new ("greenfield") municipal solid waste (MSW) landfills. The application for an MSW facility is divided into Parts I–IV. The owner or operator of a proposed MSW landfill may request a land-use only determination by submitting a partial application consisting of Parts I and II. This is known as a bifurcated application. All four Type I MSW landfill new permit applications submitted in the last three years have been bifurcated submittals. All four applications have received significant public interest and many protesters have questioned items such as the use of the

bifurcated process, the number of notices of deficiency (NOD) issued on a given application, and the location of proposed facilities within aquifer recharge zones. The following greenfield Type I MSW landfill applications are pending:

- Webb County: Pescadito Environmental Resource Center
- Waller County: Pintail Landfill
- Guadalupe County: Post Oak Landfill
- Caldwell County: 130 Environmental Park Landfill

Other Key Issues

Oil and Gas Activities

The Barnett Shale formation in the Dallas–Fort Worth area was the starting point of the new national oil and gas energy boom. The activities associated with the Barnett Shale formation presented a unique challenge for the TCEQ, because it was the first instance in Texas where a significant number of natural gas production and storage facilities were constructed and operated within heavily populated areas. In response to that challenge and increased activities in other oil and gas plays throughout Texas, the TCEQ has been improving estimated emissions data from oil and gas production and continues to conduct in-depth investigations to fully evaluate potential health effects, in order to help ensure that the agency is in front of any environmental issues in the Eagle Ford Shale area and other oil and gas plays in Texas.

Emerging Issues Associated with Oil and Gas Operations

With enhanced drilling methods and increased demand for oil and natural gas, exploration for oil and gas has increased statewide. The increased oil and gas activity in urban areas experienced in the Barnett Shale provided new potential impacts to air quality for the TCEQ to address. A large portion of the producing shale is located in urban areas of North Texas, including Tarrant County. With this increased potential impact, the TCEQ's Dallas–Fort Worth (DFW) regional office

has experienced a significant increase in complaints and requests for monitoring in both rural and urban areas.

The increased development in the Eagle Ford Shale has also affected the TCEQ. The Eagle Ford Shale trends across Texas from the Mexican border up into East Texas, roughly 50 miles wide and 400 miles long. A large portion of the producing shale is located in rural south-central Texas areas, stretching from as far west as Maverick, Dimmitt, and Webb counties to as far east as Grimes and Walker counties. The increased exploration and production activity has brought municipal waste disposal infrastructure concerns, as well as impacts to roadways and small businesses. Additionally, increased production activities have increased the need for options for drilling-waste disposal.

Issues

- Increased public concern.
- Increased complaints regarding drilling, fracturing, production, and compression.
- Need for infrastructure for drinking water, wastewater, municipal waste disposal, and transportation.
- Increased need for options for drilling-waste disposal.
- Agency workload.

Agency Actions

Since 2010, a number of actions have been taken and planned to address issues related to oil and gas operations. These activities fall into six broad categories:

- Outreach
- Enhanced Investigation Protocols
- Air Activities
 - Increased Monitoring
 - Emissions Inventory
- Water Issues
 - Public Water Supplies
 - Water Use
 - Water Quality
 - Groundwater Monitoring
- Waste Disposal Issues
- Agency Workload Issues

Outreach

Perhaps the most important lesson learned by the TCEQ since our efforts on the Barnett Shale began, relates to the need for abundant and timely communication with all interested parties. For example, in 2011, the agency has met with 19 county judges in the Eagle Ford area to discuss how this new oil and gas play is affecting their counties. As a follow-up to the meetings with the judges, three workshops were held for the local government agencies in the Eagle Ford area. The meetings were held in Cotulla, Jordanton, and Cuero, with many programs of the agency being involved, along with the Railroad Commission of Texas.

Agency staff from the central office and the affected regions have been providing general TCEQ oil and gas presentations as requested. Some examples of groups requesting these presentations are: Frio County Commissioners, Dallas City Commissioners, the City of Fort Worth, Port Industries of Corpus Christi, the Carrizo Springs Small Business Development Center, and representatives from 19 countries.

Additionally, the TCEQ has held discussions on water reuse, water rights, and water hauling with several local governments in South Texas, which have been approached about using their effluent for hydraulic fracturing.

The agency has provided a regulatory overview at the past two Eagle Ford Consortium conferences in San Antonio and Chairman Shaw was a keynote speaker at this year's conference, in April.

In April 2014, the agency—in conjunction with the Railroad Commission of Texas (RRC)—conducted three workshops in West Texas: San Angelo, Big Spring, and Lubbock. The workshops were designed to provide local governments with information on jurisdictional authority between the TCEQ and the RRC, as well as an overview of air, water, and waste rules that apply to the oil and gas industry. Additionally, TCEQ and RRC technical staff were available to provide information on compliance assistance available to local governments, who are seeing the impact of increased activity on resources such as drinking-water systems, wastewater treatment plants, and landfill capacity.

At the agency's 2014 Environmental Trade Fair, in May, as in years past, the agency conducted an oil and gas information track for the participants. The oil and gas track provided information on how the agency is dealing with different air, water, and waste issues that are affecting industry, local governments, and the public. The RRC and the Bureau of Economic Geology also provided presentations. This information track is continually one of the best-attended tracks, averaging over 250 people at each presentation.

As part of this communication effort, the agency has created and maintains a multimedia website, <www.TexasOilandGasHelp.org>, that serves as a gateway to the TCEQ for the industry and local governments. The website includes links to rules, regulatory guidance, guidance documents, and frequently asked questions for the oil and gas industry, supporting industries, and local governments affected by oil and gas activities.

Lastly, the TCEQ continues to coordinate closely with the RRC to exchange knowledge on potential environmental issues surrounding the oil and gas industry and to address jurisdictional issues as they arise.

Enhanced Investigation Protocols

In December 2009, the agency implemented a 12-hour response time for all complaints received concerning oil and gas facilities in the 24-county Barnett Shale area. From Jan. 2, 2009, through April 9, 2012, over 1,179 complaints were investigated. As of Feb. 27, 2012, the 12-hour complaint response, or "Immediate Response" priority, was modified to only include complaints about odors or emissions from oil and natural-gas activities in the Barnett Shale that are currently occurring and constitute an imminent threat to public health, safety, or the environment and complaints concerning odor from an oil or natural-gas site with confirmed odor-nuisance conditions in the previous 12 months. All other oil and natural-gas related complaints across the state are given priority in accordance with the Field Operations Standard Operating Procedures.

The TCEQ not only responds to complaints in oil and gas production areas by conducting investigations;

investigators also conduct routine compliance investigations of regulated entities. In addition, the TCEQ may conduct reconnaissance investigations in areas where one or more of the following criteria apply: historic complaints have been received, flyovers (aerial surveys) of regulated facilities have been conducted, clusters of regulated facilities are located, follow-up of an ongoing investigation is required, or other factors that indicate the need for an on-site presence outside of a normal frequency. The increased investigation workload due to oil and gas activities affects several programs, including public water supply, wastewater collection and treatment, air quality, solid waste disposal, dust control, and surface water usage.

The TCEQ evaluates all complaints, whether oral or written, alleging a possible environmental, health, or regulatory concern. Upon receipt of a complaint, it is documented and then screened to determine if the complaint is within TCEQ statutory jurisdiction. Complaints that are within TCEQ's jurisdiction are typically followed up by a formal investigation. Complaints that are not within the TCEQ's jurisdiction are formally referred to the appropriate federal, state, or local authorities, and the complainants are provided the relevant contact information. Approximately 22 percent of the complaints received by the TCEQ in the last year were referred to other jurisdictions.

Air Activities

Increased Monitoring

The agency continues to evaluate its existing ambient air quality monitoring network and will be expanding the statewide network as needed. For example, there are currently 15 automatic gas chromatograph (Auto GC) monitors operating in the Barnett Shale area, along with numerous other instruments that monitor for criteria pollutants. Furthermore, there are 16 every-sixth-day VOC canister samplers located throughout the TCEQ's Region 3 (Abilene) and Region 4 (Dallas–Fort Worth) counties.

The agency has also established a precursor ozone monitoring station south of the San Antonio area and in Wilson County, which is located in the Eagle Ford Shale area. The monitoring station is located in the

town of Floresville. Data from this new monitoring station will be used to determine if the Eagle Ford Shale oil and gas play could be contributing to the formation of ozone in the San Antonio area. However, it should be noted that the existing statewide monitoring network located within oil and gas plays shows no indications that these emissions are of sufficient concentration or duration to harm residents.

The TCEQ continues to use innovative approaches to find “real-world solutions” that actually reduce emissions. The TCEQ has undertaken numerous projects that use state-of-the-art technology to assess and address emissions from oil and gas activities. These initiatives have resulted and will continue to result in emissions reductions as well as improved agency policy and guidance. For example, the agency continues to conduct aerial surveys or flyovers using a helicopter with an infrared VOC camera as a screening tool. This camera is a proactive tool that helps to identify new air emission sources and allow staff to focus their resources on potentially problematic areas.

These flyover surveys not only image storage tanks but look at flares located at oil and gas well sites. The latest flyover was conducted during the 2013 summer and covered 23 counties and over 4,200 square miles in the Eagle Ford Shale and Permian Basin areas. In this flyover, over 16,000 storage tanks were observed with only 800 “visible” emissions observed from the storage tanks, or only approximately 5 percent of the observed storage tanks were found to have some degree of emissions, either authorized or unauthorized. These flyovers were and will continue to be used as a screening tool only. Sites that are identified will be examined further through on-site investigations.

Furthermore, in the spring of 2014, the University of Texas at Austin (UT Austin) will be conducting an Eagle Ford Shale Mobile Monitoring Study. In this study, UT Austin is under contract with the TCEQ and will be conducting mobile monitoring upwind and downwind of the Eagle Ford Shale area. UT Austin will be monitoring for ozone precursors to determine if there is a significant increase downwind of the shale

play. Furthermore, UT Austin will be looking to see if the existing Wilson County (Floresville) monitor provides data representative of a large area downwind of the Eagle Ford Shale play.

Emissions Inventory

The TCEQ continues to dedicate resources to maintaining, updating, and improving the oil and gas emissions inventory. The oil and gas emissions inventory is developed from reported emissions data from large oil and gas sources and a “top-down” process to estimate emissions from area (small) sources. To improve the inventory, research projects are conducted to refine methods and update activity data used for developing emissions estimates. Recently completed projects include studies on heaters, boilers, condensate tanks, and potential oil and gas growth scenarios.

Water Issues

Public Water Supplies

As drilling activities have increased statewide, so has the need for local housing, facilities, and infrastructure to support the people employed by the oil and gas companies. The TCEQ has worked with public water suppliers to plan for and implement facility expansions to accommodate local population growth. Temporary housing is often used where local housing supplies are not available. The TCEQ has worked to develop guidance for temporary housing that assists housing providers in determining if they are a public water supplier and to provide oversight of proper waste disposal activities.

Water Use

Surface waters, reclaimed water (e.g. wastewater or direct reuse), and groundwater may be used in oil and gas production and related activities. The TCEQ is the state agency with the authority to manage surface water and authorize the use of reclaimed water. Chapter 36 of the Water Code provides for groundwater management by local groundwater conservation districts (GCDs) – the TCEQ does not regulate the use of groundwater.

Surface Water. The most common type of water-right permit sought by entities using surface water to supply water for oil and gas operations is a temporary water-use permit for ten acre-feet or less, for one year or less. This type of temporary water-use permit is issued by the TCEQ regional or watermaster offices after a field investigation determines water availability, and typically within 30 days. Surface water is not always available for use. Since 2010, ongoing drought conditions across Texas have strained water resources and resulted in priority calls on water rights in several river basins. New temporary permits are not issued and current temporary permits may be suspended during a priority call.

Surface water may also be obtained by purchasing water from a water supplier. If an oil and gas operation is purchasing wastewater for use that originated as surface water from a municipality, the municipality's underlying water right must have an authorized mining use. If an oil and gas operation is purchasing wastewater that is transported via a watercourse, a bed and banks water-right permit may be required.

Reclaimed Water. For some time, the TCEQ has authorized the direct reuse of wastewater, although the interest in direct reuse has increased significantly as a result of the drought and with the development of additional gas production in the state. Primarily, authorizations for the reuse of domestic reclaimed wastewater for oil and gas hydraulic fracturing are issued under Texas Administrative Code (TAC), Section 210. Authorizations may also be obtained under a Texas Pollutant Discharge Elimination System (TPDES) permit, or a Texas Land Application Permit (TLAP). In 2012 and 2013, the TCEQ issued 91 domestic/municipal reclaimed water authorizations and 25 industrial reclaimed water authorizations.

Recycled Water. Water from oil and gas activities that is recycled and reused in oil and gas activities is regulated by the Railroad Commission of Texas.

Water Quality

Surface Water Quality Monitoring. The TCEQ Clean Rivers and Surface Water Quality Monitoring

programs routinely monitor the quality of rivers, lakes, bays, and the Gulf of Mexico to determine if established state water quality standards are being met. The Texas Clean Rivers Program (CRP) is a partnership between the TCEQ and 15 regional water authorities to perform strategic and comprehensive surface water quality monitoring and evaluation of water quality conditions, and involve local stakeholders in the ongoing effort.

Each year, staff from these programs meet to develop a monitoring schedule for each river basin in Texas. Over 1,800 sites across Texas are monitored to determine if state water quality standards are met. The data and assessment of the quality of Texas' river, lakes, and estuaries is then made available in the Integrated Report (required by sections 305 and 303 (d) of the Clean Water Act).

Routine water quality monitoring does not specifically target pollutants related to oil and gas production; however, monitoring does include constituents that could indicate oil and gas activities are affecting a water body. These constituents include chloride, sulfate, and total dissolved solids—all of which could also occur from a variety of other sources, including natural background concentrations.

In addition to routine monitoring, targeted monitoring can include a broader range of chemicals, such as metals and organic substances, to screen sites for specific constituents in areas where contamination is suspected. Organics in water and in sediment samples have been collected at select sites by monitoring personnel in order to determine contamination of surface water by pesticides, herbicides, and other specific compounds, such as methyl tertiary-butyl ether (MTBE), a gasoline additive. The TCEQ water quality standards have human-health criteria for a variety of these chemicals, as well as multi-purpose criteria for chloride, sulfate, and total dissolved solids.

Groundwater Monitoring

Texas Groundwater Protection Committee. The Texas Water Code requires the Texas Groundwater Protection Committee (established by the 71st Legislature

in 1989) to compile and publish a joint groundwater monitoring and contamination report that contains, among other information, a description of each case of groundwater contamination documented during the previous calendar year. TCEQ staff provided administrative support for the Texas Groundwater Protection Committee and also prepared this document.

For calendar year 2013, there were 3,563 documented cases of groundwater contamination described in the report. None of the causes of contamination documented in this report, nor in the 24 prior editions of the report, have been attributed to hydraulic fracturing.

Since 1989, the TCEQ has been providing written notices to county judges, county health officers, certain members of the regulated community, other state agencies with interest, and local groundwater conservation districts, that a potential public-health hazard exists because usable groundwater has been or is being contaminated. From 1989 through the end of calendar year 2013, the Commission has issued 2,005 contamination notices where a potential public-health hazard exists. None of these notices have been for contamination resulting from hydraulic fracturing.

In 2003, the Texas Water Code was amended to require the TCEQ to provide written notification to each applicable groundwater conservation district and each owner of a private drinking-water well that may be affected by groundwater contamination. Through the end of calendar year 2013, 13,377 notices have been mailed for 4,549 cases of groundwater contamination. None of these notices have been for contamination resulting from hydraulic fracturing.

Waste Disposal Issues

Another issue resulting from oil and gas operations has been the significant increase in disposal of oil and gas waste at municipal solid waste (MSW) landfills due to oil and gas-related activity in the various shale plays and a fairly small number of Railroad Commission of Texas (RRC)–permitted facilities. Oil and gas wastes include drilling fluids, produced

waters, and other wastes associated with the exploration, development, and production of crude oil, natural gas, and geothermal energy. These wastes are federally exempt from hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA). In Texas, these wastes are regulated by the RRC and have historically been disposed of at RRC-authorized facilities. TCEQ rules classify oil and gas waste regulated by the RRC as “special waste” when disposed of at an MSW landfill.

Specific issues concerning oil and gas waste disposal are:

- Texas has recognized an increase in the disposal of O&G waste at MSW landfills and a need for additional options for O&G waste disposal.
- O&G wastes disposed of at MSW landfills require special waste authorization from the TCEQ if such wastes are not included in the landfill’s waste-acceptance plan.
- Wastes containing over 1,500 ppm total petroleum hydrocarbon (TPH) must be disposed of in a Class 1 cell. Based on the report titled *Municipal Solid Waste in Texas: A Year in Review, FY 2012 Data Summary and Analysis*, 10 landfills in Texas are actively receiving Class 1 waste. Of these, only two are located in counties within the Eagle Ford Shale area.

Planned Action

Due to this need for additional treatment and disposal facilities in closer proximity to shale plays, the TCEQ has reached out to landfills in the Eagle Ford Shale area that have seen an escalating volume of waste arriving at their site to ensure that they can accommodate the volume and prevent the potential for illegal disposal. The MSW industry representatives have suggested that the TCEQ should anticipate receiving an increased number of MSW landfill permit amendments and modifications to allow for the acceptance of oil and gas waste for processing or disposal. This will likely also cause an increase in applications requesting a special waste determination for oil and gas waste.

Agency Workload Issues

Air authorizations for oil and gas facilities in the state have increased over the last five years, with large increases in 2011, 2012, and 2013. The bulk of the authorizations issued for oil and gas sites are permits by rule (PBRs), followed by standard permits, and, lastly, case-by-case new-source review permits. In 2011, 2,754 PBRs were registered, along with an additional 547 standard permits. This number increased in 2012 to 3,142 PBRs and 560 standard permits. In 2013, the numbers increased again to 4,099 PBRs and 708 standard permits. In the first two months of 2014 alone, the TCEQ has already processed a total of 1,530 PBR and standard-permit registrations. This increased activity does not take into account the exponentially larger number of sites that are authorized but do not require registration. The increased workload for permitting staff has created the need for additional streamlining measures to allow for the efficient processing of registrations.

The increased number of sites and authorizations has also increased the workloads of the TCEQ regional offices, which conducted 3,939 investigations in relation to oil and gas operations from September 2009 to March 2014 in the Barnett Shale and Eagle Ford Shale areas. Since September 2012, the regional offices conducted over 700 investigations in relation to oil and gas operations in the Eagle Ford Shale areas.

In addition to conducting routine, complaint, and reconnaissance investigations for oil and gas activities, the TCEQ secured the services of a contractor to conduct aerial surveys (also referred to as “flyovers”). Flyovers were conducted in the Eagle Ford Shale area in the summer of 2011, and in both the Eagle Ford Shale area and the Permian Basin area in the summer of 2013. All of the flyovers utilized infrared imaging cameras mounted on aircraft to identify potential sources of emissions.

The 2013 flyovers conducted in the Eagle Ford Shale area resulted in the collection of 286 aerial video images, and over 10,000 individual tanks were surveyed. The vast majority of these images identified no issues. Approximately 5 percent of the tanks surveyed were found to have some degree of emissions,

either authorized or unauthorized. On the ground, follow-up investigations have been conducted at facilities with observed emissions to determine compliance with authorizations and regulations. Additionally, the TCEQ, in coordination with other regulatory agencies, has conducted special outreach to ensure that oil and gas representatives are aware of the requirements, has invested additional resources into monitoring and investigations (often expedited investigations), and has conducted research to better understand emissions associated with oil and gas activities.

Electronics Reuse and Recycling

For several years, under general statutory mandates to promote reuse and recycling, the TCEQ facilitated the reuse and recycling of used electronics through online recycler-locator services and outreach. House Bill (HB) 2714, passed by the 80th Legislature, in 2007, required the TCEQ to help implement the Texas Recycles Computers program in Texas based on individual manufacturer responsibility and shared responsibility among consumers, retailers, and state government. On May 21, 2008, the agency adopted rules implementing the program. Since the program’s inception, manufacturers have reported collecting more than 96 million pounds of covered computers.

Senate Bill (SB) 329, passed by the 82nd Legislature, in 2011, created the Texas Recycles TVs program, separate from and more extensive than the existing computer-equipment recycling program. The new program includes shared responsibility among consumers, retailers, recyclers, manufacturers, and the government of this state for recycling covered television equipment. On March 28, 2012, the commission adopted new rules for implementing the program.

The TCEQ published the list of approved TV manufacturers on March 28, 2013, available at <www.TexasRecyclesTVs.org>. The recycling programs established through the Texas Recycles TVs program are expected to increase the television recycling rate for the state. Starting in 2014, the second year of the program, individual manufacturers will be required to recycle their market-share allocation. In 2014, there

will be two Recycling Leadership Programs (RLPs) offering more than 400 collection sites and events. As the program matures, its reporting requirements will allow the TCEQ to assess the progress of the television recycling rate and the RLPs.

With the implementation of the new Texas Recycles TVs program, public outreach has merged with the marketing of the Texas Recycles Computers Program. The TCEQ's outreach efforts encourage electronics recycling and provide continued compliance-assistance resources for all responsible parties. The central focus of both programs remains public education and outreach.

The TCEQ will continue outreach and compliance assistance for recyclers, manufacturers, and retailers through presentations, brochure distribution, and resource development. Through these efforts in the coming years of the program, the electronics recycling programs expect to offer additional compliance assistance as new program participants are identified and as awareness of the program expands.

The TCEQ will continue to educate consumers about the Texas Recycles TVs and Texas Recycles Computers programs. The development of a new brochure and presentations covering both programs emphasize the support for electronics recycling rather than focusing on a single program. The programs are ongoing.

Partnering with the Texas Water Development Board on Public Outreach for Prop. 6 Water Projects

The 83rd Texas Legislature passed, and Governor Perry signed, HB 4 and HB 1025, which provide a framework and funding for the implementation of the State Water Plan. This landmark legislation, as well as the overwhelming approval of Proposition 6 by Texas voters, will ensure that Texas has a reliable water supply for the next 50 years.

Governor Perry also noted that it is imperative for state agencies to coordinate with one another and the state's water interests to ensure the development of effective water-management strategies. To this end, he

directed a number of agencies, including the TCEQ, to designate a liaison that will coordinate with the Texas Water Development Board (TWDB), attend regional water-planning-group meetings, and provide solution-based assistance and support regarding implementation of the State Water Plan.

The TCEQ's water-project liaison is the director of the TCEQ's Small Business and Environmental Assistance Division (SBEA). SBEA's primary role is to provide technical compliance assistance, and it has extensive experience with helping regulated entities navigate the TCEQ's programs.

Water projects may require multiple environmental authorizations, across all environmental media (air, water, and waste). The water liaison will be a single point of contact for water-project applicants and will help identify the types of authorizations and permits that may be required from the TCEQ. Then, the liaison will work with TCEQ programs to ensure that the required permit applications are processed as efficiently and promptly as possible.

According to the TWDB, funding will be available for projects by early 2015. The TCEQ will actively participate in this process to help ensure the full implementation of the State Water Plan.

Take Care of Texas Campaign

Take Care of Texas is a statewide public-outreach campaign of the TCEQ that provides helpful information on Texas' successes in environmental protection and encourages all Texans to help keep our air and water clean, conserve water and energy, and reduce waste. By educating the public and engaging with citizens' sense of personal responsibility, the Take Care of Texas Campaign is consistent with the TCEQ's mission to protect our state's public health and natural resources.

In 2013, the TCEQ partnered with the Texas Parks and Wildlife Department to launch a series of public-service announcements (PSAs) for radio and television featuring the country-music star Kevin Fowler. These PSAs are designed to spur Texans to do their part by experiencing the outdoors and taking steps to protect Texas' natural resources.

The year 2013 also saw the launch of a new Take Care of Texas website designed to improve access to information and general usability. To further increase outreach, social-media pages for the campaign were created on Twitter and Facebook and videos were posted to the TCEQ's YouTube channel.

To achieve its goal of encouraging and educating Texans to help keep our air and water clean, conserve water and energy, and reduce waste, the Take Care of Texas campaign provides:

- Over 29 publications (many available in both English and Spanish) that are available for free to the public and range from multi-page handouts and brochures to bumper stickers and bookmarks.
- Tips and resources to enable Texans to conserve water and energy and reduce waste in their home, yard, and workplace.
- Activities and educational materials directed at youth (ages 3 to 14), which include a section of the website devoted to kids with six original online games; a guide for teachers that serves as a catalogue of education resources; and tips enabling youth to conserve water, keep air clean, and perform other activities that are environmentally beneficial.
- Information on successes and tips regarding water conservation, water quality, and air quality. This includes the TCEQ's air quality daily forecast; resources regarding plans, programs, and organizations that discuss and monitor water quality; and resources regarding the Texas drought.
- A monthly electronic newsletter, *Take Care of Texas News You Can Use*, with up-to-date articles, tips, links, and other information on news, events, and ways Texans can do their part. Other online communication efforts include targeted e-mails, Web updates, and specific efforts such as coordination with the TCEQ's Office of Water to inform public water systems that have implemented outdoor water restrictions of water-conservation materials available to them for free, including utility-bill stuffers with water-saving tips.
- Presence and attendance at relevant professional conferences and meetings—such as an environmental event, or a gathering of science teachers—with booths, staff, and materials to better reach target audiences.
- Examples of Texans doing their part to Take Care of Texas by changing business practices, starting community projects, and taking other steps to protect natural resources in Texas. Many of these examples are videos of past winners of the Texas Environmental Excellence Awards (<www.TEEA.org>).
- An opportunity for Texans to pledge online to Take Care of Texas, to create more of a connection with the message of the campaign and how it affects their daily lives.

Federal Coordination of Sanitary Sewer Overflows (SSOs)

The EPA has a national initiative to address sanitary sewer overflows (SSOs). On June 1, 2010, the EPA published a notice in the *Federal Register* announcing listening sessions to seek stakeholder input on potential modifications to the National Pollutant Discharge Elimination System (NPDES) regulations. Specifically, the EPA was considering whether to revise the regulations as they apply to municipal sanitary sewer collection systems and SSOs to better protect the environment and public health.

Under the current NPDES regulatory framework, only wastewater treatment facilities are required to obtain authorization under a NPDES permit. A municipal satellite collection system—a sewer system owned or operated by a municipality that conveys wastewater to a wastewater treatment facility operated by a different municipality—is not currently required to obtain a permit. During the listening sessions, the EPA was seeking public input on whether to extend the NPDES requirements, including applicable standard-permit conditions, to municipal satellite collection systems. The EPA has not yet published a proposed rule regarding this issue.

The existing NPDES standard-permit conditions applicable to SSOs are incorporated within the Texas

Pollutant Discharge Elimination System (TPDES) permits and in the Texas Water Code, Section 26.049 (Sanitary Sewer Overflows), Section 26.039 (Accidental Discharges and Spills), and Section 26.121 (Unauthorized Discharges Prohibited). Under these regulatory requirements, all wastewater treatment facilities and satellite collection systems are required to report to the TCEQ any SSO that occurs from their systems. These SSO event notifications are received by the TCEQ from the regulated entities through paper copies (specifically on the “Water Quality Noncompliance Notification” form [TCEQ-00501]) via fax or mail. This information is then manually entered by TCEQ personnel into the agency’s Consolidated Compliance and Enforcement Data System (CCEDS).

Under the federal SSO initiative, EPA Region VI has been reviewing the SSO history of municipalities permitted for greater than 10 million gallons per day, and taking federal enforcement action if deemed necessary. As part of these reviews, EPA Region VI routinely requests the SSO information, in the form of electronic reports as well as the actual copies of TCEQ-00501 forms submitted by the entities. Often the data-gathering efforts of these requests can be resource-intensive.

On July 30, 2013, the EPA published a proposed rule (NPDES e-Reporting Rule) that, once finalized, would require the regulated entities to report the SSO events electronically. Once this rule is implemented and a system has been established for accepting electronic reports, it is anticipated that the level of resource effort that currently goes into manual entry of the SSO data on the state level will significantly decrease. The EPA currently estimates that the NPDES e-Reporting Rule will become effective in early 2015.

In 2004, the TCEQ initiated a voluntary program called the SSO Initiative, in an effort to address the increase in SSOs due to aging collection systems throughout the state and encourage corrective action to prevent potential harm to human health and safety or the environment. Currently, there are more than 200 entities statewide that have been invited to participate in the SSO Initiative, who are either in

the process of obtaining an approved SSO Initiative plan, or have a final agreement that is signed and in effect. Some of these participants have been or will be reviewed and may be subject to federal enforcement by EPA Region VI under the federal initiative despite their participation in the TCEQ’s SSO Initiative program. The TCEQ and EPA Region VI regularly coordinate on SSO issues, and Region VI has explained that they are taking into consideration any efforts put forth by entities participating in the TCEQ SSO Initiative before initiating formal federal enforcement.

Increased Development in the Edwards Aquifer

A complete “Edwards Aquifer protection plan application for proposed projects” must be submitted and approved by the TCEQ prior to starting any regulated activity on the recharge zone of the Edwards Aquifer. Additionally, when appropriate, a complete Edwards Aquifer protection plan application must be submitted and approved for activity on the contributing and transition zones of the Edwards Aquifer. The review process and approvals help ensure that the water quality of the Edwards Aquifer continues to be protected as a unique natural resource in the Central Texas area. The Edwards Aquifer regulatory boundaries lie in the following eight counties: Williamson, Travis, Hays, Comal, Bexar, Medina, Kinney, and Uvalde. The Edwards Aquifer Protection Program is housed entirely within the TCEQ’s Austin and San Antonio regional offices.

Strong economic growth trends in the Edwards Aquifer regulated zones have resulted and will continue to result in increased activity with the potential for water quality impacts. In addition to the increase in land development, there is also an increase in the diversity of the types of developments over the aquifer. In the past five years, the TCEQ has experienced a significant increase in plan applications for proposed construction projects. In 2010, for example, the TCEQ reviewed 420 applications. In the following years, the number of applications submitted has steadily increased, up to 540 in 2013. In 2014, the TCEQ is on target to review over 700 applications.

Dam Safety Program

The Dam Safety Program monitors and regulates both private and public dams in Texas. The program inspects dams that pose a high or significant hazard at least once every five years and provides recommendations and reports to responsible parties (owners) to help them maintain safe facilities. The program ensures that these facilities are constructed, maintained, repaired, and removed safely. High- or significant-hazard dams are those where loss of life could occur if the dam should fail.

As a result of the 2008 state audit, and in response to the interests of the Senate Committee on Natural Resources, the agency submitted an exceptional-item request to augment the Dam Safety Program. This request was approved for the 2010–2011 fiscal biennium, increasing the number of staff of the Dam Safety Program and providing data support. New rules were developed and became effective Jan. 1, 2009. The requirement for emergency action plans for high- and significant-hazard dams was added at that time. The rule revisions:

- Established requirements for emergency action plans, gate operating plans, and security plans, and better defined the responsibilities of the dam owner.
- Required new dams to meet certain design standards and existing dams to have additional nonstructural measures in place.
- Removed small and intermediate-size, low-hazard dams from the periodic inspection schedule, and established an inspection frequency of five years for high- and significant-hazard dams and large, low-hazard dams.
- Allowed inspections by the owner or the owner's representative in lieu of agency inspections.
- Changed the definition of "dam," thereby reducing the number of small, low-hazard dams under the jurisdiction of the agency.
- Updated existing criteria to make them more consistent with current engineering practices.

During the 81st Legislature, \$2.5 million was appropriated for 24 additional staff over a two year period. There are now 26 technical staff members and two administrative staff members in the Dam Safety

Section, Critical Infrastructure Division. Of these, two technical staff are located in regional offices: Houston and Dallas–Fort Worth.

The TCEQ Sunset legislation, HB 2694, 82nd Legislature, amended Texas Water Code (TWC) 12.052, to exempt all dams on private property that impound 500 acre-feet or less and meet certain other conditions from complying with requirements relating to dam safety. These statutory changes, along with a Sunset Advisory Commission's management directive to exempt dams that are classified as low-hazard from adhering to hydrologic and hydraulic criteria, required changes to the agency's Dam Safety Program.

In 2013, HB 677, 83rd Legislature, amended Texas Water Code 12.052 to make the exemption permanent and to increase the number of counties that were included.

As of March 25, 2014, there are 3,988 state-regulated dams, with 1,093 high-hazard dams and 474 significant-hazard dams. The remaining are classified as low-hazard. The legislation described above removed 216 significant-hazard dams from the inspection program effective Sept. 1, 2013.

The program has a commitment to conduct inspections on all high- and significant-hazard dams over a five-year period ending Aug., 31, 2016. As of March 25, 2014, there were 1,567 dams in the high- and significant-hazard classifications. Of these, 491, or 33 percent, have been inspected.

The total number of dam safety assessments conducted, by fiscal year, was:

- 2011: 1,041
- 2012: 1,373
- 2013: 936

The number of field inspections conducted, by fiscal year, was:

- 2011: 535
- 2012: 191
- 2013: 232

The number of emergency action plans reviewed, by fiscal year, was:

- 2011: 426
- 2012: 482
- 2013: 304

Since January 2009, when the new rules became effective, 1,257 emergency action plans have been reviewed.

Three dam-owner workshops were conducted in fiscal 2013 (248 people registered), three in fiscal 2012 (248 people registered), and four in fiscal 2011 (262 people registered). These workshops are conducted primarily to provide information regarding emergency action plans and maintenance of dams for dam owners and engineers; however, emergency personnel have also attended the workshops.

Approximately 43 percent of the dams inspected are either in fair or poor condition. However, the majority of dam owners are taking the inspection results seriously and are making repairs as funds are available. Costly items, such as major repairs and modifications, are being delayed until funds become available.

Plans for FYs 2015–2019

It is anticipated that staff will continue to conduct inspections of high- and significant-hazard dams on a five-year frequency, with the intent that all high- and significant-hazard dams be inspected by Aug. 31, 2016. In addition, emphasis will be placed on inspecting dams more frequently if they have been found to be in poor condition. The staff is also in the process of identifying dams that are not in the Dam Safety Inventory, as recommended in the State Auditor’s Office report. As these dams are identified, they will be added to the inspection schedule if they are determined to be high- or significant-hazard dams.

The program will also continue to review emergency action plans as they are received. Additional workshops will be held to address maintenance, emergency action plans, and ways to correct dam deficiencies.

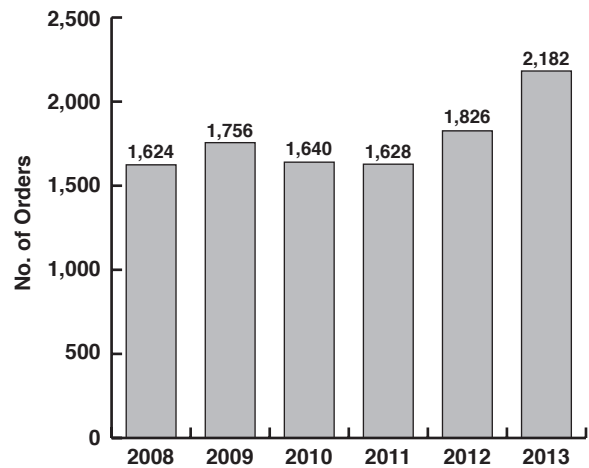
Enforcement Initiatives

Enforcement Administrative Orders

The TCEQ issued 2,182 administrative orders in fiscal 2013 (see Figure 8) with over \$12.4 million to be paid as

penalties and over \$2.4 million to be expended for supplemental environmental projects (SEPs). There were an additional 43 civil judicial orders issued through representation by the Texas Attorney General’s Office that resulted in over \$10.8 million to be paid as penalties and \$138,750 to be expended for SEPs. Most of the enforcement orders issued by the TCEQ were for the waste program (53%) and were the result of an increase in enforcement activity in the Petroleum Storage Tank Program as a result of the federal Energy Policy Act of 2005. This law requires that each underground storage tank be investigated every three years.

Figure 8.
Administrative Orders Issued, FYs 2008–2013



Data Source: Annual Enforcement Report, Fiscal Year 2013 (Austin: TCEQ, 2013).

Field Citations

The Field Citation (FC) Program was originally approved as a pilot on March 13, 2006. During the April 27, 2007, Commissioner’s Work Session, the TCEQ commissioners voted to shift the TCEQ’s FC Program from pilot to permanent status.

In response to the approved Penalty Policy revision at the Sept. 28, 2011, work session, the FC Program was revisited, and revised to reflect changes in the statutory maximum penalties and to add violations that were

eligible for the program. These changes were approved at the Nov. 2, 2011, Commissioners' Agenda meeting.

The FC Program includes only violations that were determined by the commission to be "clear cut" and able to be easily corrected to help make the enforcement process more efficient for both the TCEQ and the regulated entity involved.

The field citation is intended to promote a quick resolution for any of the field citation-eligible violations that are documented during a TCEQ investigation, while offering a reduced penalty as compared to a penalty calculated through the traditional enforcement process.

The FC Program covers violations in the following programs:

- Petroleum Storage Tank (PST)
- Gasoline Vapor Recovery (Stages I and II)
- Stormwater (industrial and construction)
- Occupational Licenses
- Dry Cleaners
- Landscape Irrigation
- On-site Sewage Facilities
- Outdoor Burning
- Nuisance Dumping
- Water Rights

Since the program's inception, and as of April 1, 2014, 973 field citations have been issued and 750 have been paid with the violations corrected. There are three separate field-citation forms: one for the PST Program, which covers 13 violations; one for the Water Program, which covers eight violations; and one for the Air and Waste programs, which covers six violations.

Implementation of the Federal RESTORE Act

Governor Perry tasked TCEQ Commissioner Toby Baker to coordinate the implementation of the federal Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act, signed into law in 2012.

The RESTORE Act created the Gulf Coast Ecosystem Restoration Council, as well as the Gulf Coast Ecosystem Restoration Trust Fund. The council is composed of the governors from the five affected Gulf states and the secretaries from the U.S. departments of

the Interior, Commerce, Agriculture, and Homeland Security, as well as the secretary of the Army and the administrator of the EPA.

Governor Perry appointed Commissioner Baker as the Texas representative on the council.

To support the Trust Fund, the RESTORE Act dedicates 80 percent of all administrative and civil penalties related to the Deepwater Horizon oil spill. The act outlines the structure for the distribution of these monies. The Trust Fund will be used to restore and protect the economy, natural resources, ecosystems, fisheries, marine and wildlife habitats, and beaches and coastal wetlands of the Gulf Coast.

In 2013, the council adopted its Initial Comprehensive Plan. The plan laid out five overarching goals:

- Restore and conserve habitat.
- Restore water quality.
- Replenish and protect living coastal and marine resources.
- Enhance community resilience.
- Restore and revitalize the Gulf economy.

The plan also:

- Established restoration goals for the Gulf Coast.
- Outlined the project solicitation and evaluation process.
- Discussed and described the approval of State Expenditure Plans, which each state is required to submit prior to receiving monies from the Trust Fund.

Ongoing TCEQ RESTORE-related activities include:

- Commissioner Baker's active participation on the council to ensure that the interests and concerns of Texans are addressed.
- Working collaboratively with the governor-appointed Texas RESTORE Act Advisory Board (TxRAB).
- Coordinating the implementation of the RESTORE Act in Texas, including but not limited to:
 - Continuing to create a website, <restorethetexascoast.org>, to provide information on RESTORE-related activities in Texas, including the availability of funds to support projects.

- Continuing to develop a framework document with information on the importance of the Texas coastal area and outlining Texas' efforts to consider projects of significance to Texas' coastal economy and its ecological environment.
- Submitting appropriate documents to the U.S. Treasury and the council to secure funding for disbursement of grant monies.
- Continuing to design processes to accept, review, approve, and manage grants funded through the RESTORE Act.

Data-Management Issues, including Data Center Consolidation

The TCEQ continues to pursue the vision of data integration, geographic interfaces to information, and improved business processes, as outlined in our Information Strategic Plan.

The agency is beginning a multi-year effort to bring more of our traditional paper records, and the business processes that use them, under computerized management. This will increase the efficiency of internal processes, ease public access to records, and reduce the risk to agency records posed by overcrowded facilities.

The Central Registry of the agency's regulated entities has improved data integration by holding identifying information that originates from many regulatory programs in one place. We have implemented a public text-based reporting functionality on our external website that gives access to most of the data in, or linked to, the Central Registry. We are beginning a project to build a geospatial interface to this data, similar to the map-based interfaces we have built to more narrowly program-specific datasets in the past. We expect this facility to enable the public and other interested parties to access much more agency information relevant to the places in which they live and work by pointing to those places on a map. We also expect it to enable agency staff and the regulated entities to improve the accuracy of the coordinates we store for the regulated entities.

The Central Registry and several other key applications and databases were developed using a programming technology that has been productive, and has enabled many of our data-management advances over the years, but which is now out-of-date. It presents a risk to the continued development and maintenance of those systems stemming from its limited market share and a small pool of trained programmers. In conjunction with the statewide Legacy Systems Project managed by the Department of Information Resources (DIR), we have taken inventory of the systems that are at risk, and we are proposing a major project to replace these systems using current software-development technologies.

The agency continues to work with the DIR and the state's current data center service providers to support the agency's mission, while minimizing the cost and operational risk presented by the consolidation. As of the beginning of March 2014, the agency has 139 servers and their associated software and data storage in the state's data centers. The cost of storage has been rising dramatically, presenting an ongoing challenge to the agency's fiscal position. While the current service providers have improved service somewhat, agency initiatives to implement new services and replace aging systems still experience significant delays.

Supplemental Environmental Projects (SEP)

Revising SEP Guidance

At the June 14, 2013, Commission Work Session, the commission approved the revised SEP guidance document, GI-352 (*Supplemental Environmental Projects (SEPs): Putting Fines to Work Closer to Home*). The guidance document was updated to incorporate changes to the SEP Program, including the initiation of compliance SEPs and the allowing of administrative costs totaling up to 10 percent of the direct expenses of the project as set forth in HB 2290. The guidance document is pending approval by Agency Communications. After approval, it will be posted on the TCEQ website and printed as a brochure. The SEP website has been updated to reflect current practices and procedures in the SEP program and for clarity and ease of use.



Part IV

Strategic Planning Structure

Goals, Objectives, and Strategies, Fiscal Years 2016–2017

At the time of this printing, these performance measures and definitions had not received formal approval from the Legislative Budget Board or the Governor’s Office of Budget, Planning, and Policy.

Goal 01. Assessment, Planning, and Permitting

To protect public health and the environment by accurately assessing environmental conditions, by preventing or minimizing the level of contaminants released to the environment through regulation and permitting of facilities, individuals, or activities with potential to contribute to pollution levels.

Goal 01, Objective 01

To decrease the amount of toxic chemicals released into the environment via air, water, and waste pollutants in Texas by at least 2 percent as measured by comparing the most recent Toxic Release Inventory (TRI) values to the previous reported TRI reporting year values and reduce air, water, and waste pollutants through assessing the environment.

Outcome Measures

- 01-01.01 Annual percent of stationary and mobile source pollution reductions in ozone non-attainment areas
- 01-01.02 Nitrogen oxides (NO_x) emissions reduced through the Texas Emissions Reduction Plan (TERP)
- 01-01.03 Percent of Texans living where the air meets federal Air Quality Standards
- 01-01.04 Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state
- 01-01.05 Percent of classified Texas surface waters meeting or exceeding water quality standards

- 01-01.06 Annual percent of solid waste diverted from municipal solid waste landfills
- 01-01.07 Annual percent decrease in the toxic releases in Texas
- 01-01.08 Annual percent change in the amount of municipal solid waste going into Texas municipal solid waste landfills
- 01-01.09 Percent of high- and significant-hazard dams inspected within the last five years
- 01-01.10 Number of acres of habitat created, restored, and protected through implementation of estuary action plans

01-01-01. Air Quality Assessment and Planning

Reduce and prevent air pollution by monitoring and assessing air quality, developing and/or revising plans to address identified air quality problems, and assist in the implementation of approaches to reduce motor-vehicle emissions.

Output Measures

- 01-01-01.01 Number of point-source air quality assessments
- 01-01-01.02 Number of area-source air quality assessments
- 01-01-01.03 Number of on-road mobile-source air quality assessments
- 01-01-01.04 Number of non-road mobile-source air quality assessments
- 01-01-01.05 Number of air monitors operated
- 01-01-01.06 Tons of NO_x reduced through the Texas Emissions Reduction Plan
- 01-01-01.07 Number of vehicles replaced and/or repaired through LIRAP Assistance

Efficiency Measures

- 01-01-01.01 Percent of data collected by TCEQ continuous and non-continuous air-monitoring networks
- 01-01-01.02 Average cost per air quality assessment
- 01-01-01.03 Average cost of LIRAP vehicle emissions repairs/retrofits
- 01-01-01.04 Average cost/ton of NO_x reduced through the Texas Emissions Reduction Plan

Explanatory Measures

01-01-01.01 Number of days ozone exceedances are recorded in Texas

01-01-02. Water Resource Assessment and Planning

Develop plans to ensure an adequate, affordable supply of clean water by monitoring and assessing water quality and availability.

Output Measures

01-01-02.01 Number of surface water assessments

01-01-02.02 Number of groundwater assessments

01-01-02.03 Number of dam safety assessments

Efficiency Measures

01-01-02.01 Average cost per dam safety assessment

Explanatory Measures

01-01-02.01 Percent of Texas' rivers, streams, wetlands and bays protected by site-specific water quality standards

01-01-02.02 Number of dams in the Texas Dam Inventory

01-01-03. Waste Management Assessment and Planning

Ensure the proper and safe disposal of pollutants by monitoring the generation, treatment, and storage of solid waste and assessing the capacity of waste disposal facilities; and by providing financial and technical assistance to municipal solid waste planning regions for the development and implementation of waste reduction plans.

Output Measures

01-01-03.01 Number of active municipal solid waste landfill capacity assessments

Efficiency Measures

01-01-03.01 Average number of hours spent per municipal solid waste facility capacity assessment

Explanatory Measures

01-01-03.01 Number of council of governments regions in the state with 10 or more years of disposal capacity

Goal 01, Objective 02

To review and process 90 percent of air, water, and waste authorization applications within established time frames.

Outcome Measures

01-02.01 Percent of air quality permit applications reviewed within established time frames

01-02.02 Percent of water quality permit applications reviewed within established time frames

01-02.03 Percent of water rights permit applications reviewed within established time frames

01-02.04 Percent of waste management permit applications reviewed within established time frames

01-02-01. Air Quality Permitting

Perform complete and timely reviews of applications to release pollutants into the air.

Output Measures

01-02-01.01 Number of state and federal new source review air quality permit applications reviewed

01-02-01.02 Number of federal air quality operating permits reviewed

01-02-01.03 Number of Emissions Banking and Trading transaction applications reviewed

Explanatory Measures

01-02-01.01 Number of state and federal air quality permits issued

01-02-01.02 Number of federal air quality permits issued

01-02-02. Water Resource Permitting

Perform complete and timely reviews of applications to utilize the state's water resources or to discharge to the state's waterways.

Output Measures

01-02-02.01 Number of applications to address water quality impacts reviewed

- 01-02-02.02 Number of applications to address water rights impacts reviewed
- 01-02-02.03 Number of concentrated animal feeding operation (CAFO) authorizations reviewed

Explanatory Measures

- 01-02-02.01 Number of water quality permits issued
- 01-02-02.02 Number of water rights permits issued

01-02-03. Waste Management and Permitting

Perform complete and timely reviews of applications relating to management and disposal of municipal and industrial solid and hazardous waste.

Output Measures

- 01-02-03.01 Number of new system waste evaluations conducted
- 01-02-03.02 Number of non-hazardous waste permit applications reviewed
- 01-02-03.03 Number of hazardous waste permit applications reviewed

Explanatory Measures

- 01-02-03.01 Number of non-hazardous waste permits issued
- 01-02-03.02 Number of hazardous waste permits issued
- 01-02-03.03 Number of corrective actions implemented by responsible parties for solid waste sites

01-02-04. Occupational Licensing

Establish and maintain occupational certification programs to ensure compliance with statutes and regulations that protect public health and the environment.

Output Measures

- 01-02-04.01 Number of applications for occupational licensing
- 01-02-04.02 Number of examinations administered
- 01-02-04.03 Number of licenses and registrations issued

Efficiency Measures

- 01-02-04.01 Average annualized cost per license and registration

Explanatory Measures

- 01-02-04.01 Number of TCEQ-licensed environmental professionals and registered companies

Goal 01, Objective 03

To ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.

01-03-01. Low-Level Radioactive Waste Management

Ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.

Output Measures

- 01-03-01.01 Number of radiological monitoring and verification samples of air, water, soil/sediment, and fauna collected

Explanatory Measures

- 01-03-01.01 Total annual amount of revenue deposited to the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive waste and other radioactive substances
- 01-03-01.02 Volume of low-level radioactive waste accepted by the State of Texas for disposal at the Texas Compact Waste Facility

Goal 02. Drinking Water

To protect public health and the environment by assuring the delivery of safe drinking water to the citizens of Texas consistent with requirements in the Safe Drinking Water Act; by providing regulatory oversight of water conservation and reclamation districts; and by promoting regional water strategies.

Goal 02, Objective 01

To supply 95 percent of Texans served by public drinking water systems with drinking water consistent with requirements in the Safe Drinking Water Act. To provide regulatory oversight of water conservation and reclamation districts and to promote regional water strategies.

Outcome Measures

- 02-01.01 Percent of Texas population served by public water systems which meet drinking-water standards
- 02-01.02 Percent of Texas population served by public water systems protected by a program which prevents connection between potable and non-potable water sources

02-01-01. Safe Drinking Water

Ensure the delivery of safe drinking water to all citizens through monitoring and oversight of drinking water sources consistent with the requirements of the Safe Drinking Water Act.

Output Measures

- 02-01-01.01 Number of public drinking water systems which meet primary drinking water standards
- 02-01-01.02 Number of drinking water samples collected
- 02-01-01.03 Number of district applications processed

Goal 03. Enforcement and Compliance Assistance

To protect public health and the environment by administering enforcement and environmental assistance programs that promote compliance with environmental laws and regulations, voluntary efforts to prevent pollution, and offer incentives for demonstrated environmental performance while providing strict, sure, and just enforcement when environmental laws are violated.

Goal 03, Objective 01

Through fiscal 2017, maintain at least 95 percent of all regulated facilities in compliance with state environmental laws and regulations, to respond appropriately to citizen inquiries and complaints and to achieve pollution prevention, resource conservation, and enhanced compliance.

Outcome Measures

- 03-01.01 Percent of inspected or investigated air sites in compliance

- 03-01.02 Percent of inspected or investigated water sites and facilities in compliance
- 03-01.03 Percent of inspected or investigated waste sites in compliance
- 03-01.04 Percent of identified noncompliant sites and facilities for which appropriate enforcement action is taken
- 03-01.05 Percent of investigated occupational licensees in compliance
- 03-01.06 Percent of administrative orders settled
- 03-01.07 Percent of administrative penalties collected

03-01-01. Field Inspections and Complaint Response

Promote compliance with environmental laws and regulations by conducting field inspections and responding to citizen complaints.

Output Measures

- 03-01-01.01 Number of inspections and investigations of air sites
- 03-01-01.02 Number of inspections and investigations of water rights sites
- 03-01-01.03 Number of inspections and investigations of water sites and facilities
- 03-01-01.04 Number of inspections and investigations of waste sites

Efficiency Measures

- 03-01-01.01 Average time (days) from air, water, or waste inspection to report completion

Explanatory Measures

- 03-01-01.01 Number of citizen complaints investigated
- 03-01-01.02 Number of emission events investigations
- 03-01-01.03 Number of spill cleanup inspections/ investigations

03-01-02. Enforcement and Compliance Support

Maximize voluntary compliance with environmental laws and regulations by providing educational outreach and assistance to businesses and units of local governments; and assure compliance with environmental laws and regulations by taking

swift, sure, and just enforcement actions to address violation situations.

Output Measures

- 03-01-02.01 Number of environmental laboratories accredited
- 03-01-02.02 Number of small businesses and local governments assisted

Efficiency Measures

- 03-01-02.01 Average number of days to file an initial settlement offer

Explanatory Measures

- 03-01-02.01 Amount of administrative penalties paid in final orders issued
- 03-01-02.02 Amount required to be paid for supplemental environmental projects issued in administrative orders
- 03-01-02.03 Number of administrative enforcement orders issued

03-01-03. Pollution Prevention and Recycling

Enhance environmental performance, pollution prevention, recycling, and innovative programs through technical assistance, public education, and innovative programs implementation.

Output Measures

- 03-01-03.01 Number of presentations, booths, and workshops conducted on pollution prevention/waste minimization and voluntary program participation
- 03-01-03.02 Number of quarts of used oil diverted from potential improper disposal

Explanatory Measures

- 03-01-03.01 Tons of hazardous waste reduced as a result of pollution prevention planning
- 03-01-03.02 Tons of waste collected by local and regional household hazardous waste collection programs
- 03-01-03.03 Number of registered waste tire facilities and transporters

Goal 04. Pollution Cleanup

To protect public health and the environment by identifying, assessing, and prioritizing contaminated sites, and by assuring timely and cost-effective cleanup based on good science and current risk factors.

Goal 04, Objective 01

By fiscal 2017, identify, assess, and remediate six additional Superfund sites and/or other sites contaminated by hazardous materials. To identify, assess, and remediate up to 92 percent of the known leaking petroleum storage tank sites.

Outcome Measures

- 04-01.01 Percent of leaking petroleum storage tank sites cleaned up
- 04-01.02 Total number of Superfund remedial actions completed
- 04-01.03 Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse
- 04-01.04 Percent of industrial solid and municipal hazardous waste facilities cleaned up

04-01-01. Storage Tank Administration and Cleanup

Regulate the installation and operation of underground storage tanks and administer a program to identify and remediate sites contaminated by leaking storage tanks.

Output Measures

- 04-01-01.01 Number of petroleum storage tank self-certifications processed
- 04-01-01.02 Number of emergency response actions at petroleum storage tank sites
- 04-01-01.03 Number of petroleum storage tank cleanups completed

Efficiency Measures

- 04-01-01.01 Average time (days) to authorize a state lead contractor to perform corrective action activities

04-01-02. Hazardous Materials Cleanup

Aggressively pursue the investigation, design, and cleanup of federal and state Superfund sites, and facilitate voluntary cleanup activities at other sites and respond immediately to spills which threaten human health and the environment.

Output Measures

- 04-01-02.01 Number of Immediate Response Actions completed to protect human health and environment
- 04-01-02.02 Number of Superfund site assessments
- 04-01-02.03 Number of voluntary and brownfield cleanups completed
- 04-01-02.04 Number of Superfund sites in Texas undergoing evaluation and cleanup
- 04-01-02.05 Number of Superfund remedial actions completed
- 04-01-02.06 Number of Dry Cleaner Remediation Program (DCRP) site assessments initiated
- 04-01-02.07 Number of Dry Cleaner Remediation Program site cleanups completed

Efficiency Measures

- 04-01-02.01 Average time (days) to process Dry Cleaner Remediation Program applications

Explanatory Measures

- 04-01-02.01 Number of potential Superfund sites to be assessed
- 04-01-02.02 Number of state and federal Superfund sites
- 04-01-02.03 Total number of state and federal Superfund sites in post-closure care (O&M) phase
- 04-01-02.04 Number of Dry Cleaner Remediation (DCRP) eligible sites

Goal 05. Texas River Compacts

To ensure the delivery of Texas' equitable share of water.

Goal 05, Objective 01

Ensure the delivery of 100 percent of Texas' equitable share of water as apportioned by the river compacts.

Outcome Measures

- 05-01.01 The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact
- 05-01.02 The percentage received of Texas' equitable share of quality water annually as apportioned by the Pecos River Compact
- 05-01.03 The percentage received of Texas' equitable share of quality water annually as apportioned by the Red River Compact
- 05-01.04 The percentage received of Texas' equitable share of quality water annually as apportioned by the Rio Grande Compact
- 05-01.05 The percentage received of Texas' equitable share of quality water annually as apportioned by the Sabine River Compact

05-01-01. Canadian River Compact

Prepare and resolve the annual accounting of water stored by each compact state.

05-01-02. Pecos River Compact

Prepare and resolve the annual accounting of water deliveries to Texas by New Mexico as apportioned by the Pecos River Compact and the U.S. Supreme Court decree.

05-01-03. Red River Compact

Develop and implement an annual accounting system of quality water deliveries to each compact state.

05-01-04. Rio Grande Compact

Prepare and resolve the annual accounting of water deliveries to Texas by Colorado and New Mexico as apportioned by the Rio Grande Compact.

05-01-05. Sabine River Compact

Prepare and resolve the annual accounting of water diversions by Texas and Louisiana as apportioned by the Sabine River Compact.



Part V

Technology Resource Planning

Technology Initiative Assessment and Alignment

The Technology Initiative Assessment and Alignment is the strategic alignment of technology initiatives with agency business needs and priorities. Technology alignment with agency business needs is demonstrated by identifying technology initiatives, both current and planned, in the context of agency objectives. The following table identifies and describes agency technology initiatives as they relate to agency objectives.

Table 9. Alignment of Agency Technology Initiatives with Agency Objectives and Statewide Technology Priorities and Guiding Principles

Enterprise E-Commerce	
Description	An extensible system for exchanging information with the regulated community, including monitoring reports and transactions such as permit applications and fees. The existing re-usable modules will be expanded upon.
Associated Projects	None
Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	<i>Enterprise Planning and Collaboration.</i> Payment services are provided by Texas.gov.
Anticipated Benefits	Reduce costs and processing times for many types of interactions with the regulated community. Benefits would accrue both to the agency and to the participating regulated entities.
Capabilities or Barriers	The modular design of these applications reduces the effort and risk of adding new types of transactions.
Electronic Records Management System	
Description	An electronic records management system for the conversion, storage, retrieval, publishing, and disposition of records in all types of information media. The eRecords solution will leverage and integrate with existing agency technology.
Associated Projects	Electronic Records Management System
Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01

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Table 9. Alignment of Agency Technology Initiatives with Agency Objectives and Statewide Technology Priorities and Guiding Principles (continued)

Statewide Technology Priorities	<i>Data Management.</i> Improved management of agency documents.
Anticipated Benefits	Reduce costs and environmental impact of paper-based agency processes. Improve the accuracy of agency information. Greatly improve the speed and reliability of access to agency information, including public-information requests.
Capabilities or Barriers	Comprehensive imaging and records management projects are risky, and have often failed. The agency’s filing systems and central file room are costly and overflowing. The project will proceed in a series of modest steps to reduce risk and begin gaining some benefit early.

Enterprise Geospatial Portal

Description	A web-based geospatial interface to key agency information. Agency personnel responsible for maintaining data in the Central Registry will be able to display current geospatial data, correct inaccurate coordinates, and provide missing coordinates. Both external customers and agency staff will be able to access Central Registry data through the same map-based portal. An online version of the Core Data Form will be placed on the agency website to facilitate gathering key information about regulated entities.
Associated Projects	None
Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	<i>Cloud Services.</i> The agency is using cloud-based services for geospatial data. <i>Data Management.</i> The electronic map interface to agency data will allow more people to find environmental and regulatory data for geographical areas where they have an interest, and to relate multiple sources of data about those areas. Users will be able to review and correct location data for facilities they know about.
Anticipated Benefits	Improve environmental planning and increase the effectiveness of regulation by relating many types of information that affect environmental decisions. Increase the value of agency data to state and local leadership, industry, and the public, by associating them with geographical regions. Improve the quality of location data.
Capabilities or Barriers	The agency has extensive experience providing electronic access to geospatial data.

TCEQ STRATEGIC PLAN
FISCAL YEARS 2015–2019



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Agency Planning Process

The mission of the Texas Commission on Environmental Quality is to protect our state’s human and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

In accordance with the TCEQ’s mission, the agency has five goals and seven quantifiable objectives for its strategic plan for fiscal years 2015–2019. These goals and objectives reflect the environmental priorities and programs that the agency expects to implement within this time frame.

Planning Goals

Beginning with fiscal years 2016–2017, the five goals for the TCEQ are:

1. Assessment, planning, and permitting

To protect public health and the environment by accurately assessing environmental conditions, by preventing contaminants from being released to the environment, or minimizing their level, through regulation and permitting of facilities, individuals, or activities with potential to contribute to pollution levels.

2. Safe drinking water

To protect public health and the environment by assuring the delivery of safe drinking water to the citizens of Texas consistent with the requirements in the Safe Drinking Water Act, by providing regulatory oversight of conservation and reclamation districts, and by promoting regional water strategies.

3. Enforcement and compliance assistance

To protect public health and the environment by administering enforcement and environmental assistance programs that promote compliance with environmental laws and regulations, promote voluntary efforts to prevent pollution, and offer incentives for demonstrated environmental performance while providing strict, sure, and just enforcement when environmental laws are violated.

4. Pollution cleanup

To protect public health and the environment by identifying, assessing, and prioritizing contaminated sites, and by assuring timely and cost-effective cleanup based on sound science and current risk factors.

5. Texas river compacts

To ensure that Texas receives its equitable share of water.

Planning Objectives

To achieve the mission and goals of the agency, the TCEQ has adopted seven planning objectives to protect the health and human welfare of our citizens, and to promote clean industrial and business development in Texas. The seven planning objectives are:

1. To decrease the amount of toxic chemicals released into the environment via air, water, and waste pollutants by at least 2 percent as measured by comparing the most recent Toxic Release Inventory (TRI) values to the previous reported TRI reporting-year values.
2. To review and process 90 percent of air, water, and waste authorization applications within the established time frames.
3. To ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.
4. To supply 95 percent of Texans served by public drinking water systems with drinking water consistent with the requirements in the Safe Drinking Water Act. To provide regulatory oversight of water conservation and reclamation districts and promote regional water strategies.
5. To maintain at least 95 percent of all regulated facilities in compliance with state environmental laws and regulations; to respond appropriately to citizen inquiries and complaints; and to achieve pollution prevention, resource conservation, and enhanced compliance.

6. By fiscal 2017, to identify, assess, and remediate six additional Superfund sites or other sites contaminated by hazardous materials, and up to 92 percent of the leaking petroleum storage tank sites.
7. To ensure the delivery of 100 percent of Texas' equitable share of water as apportioned by the river compacts.

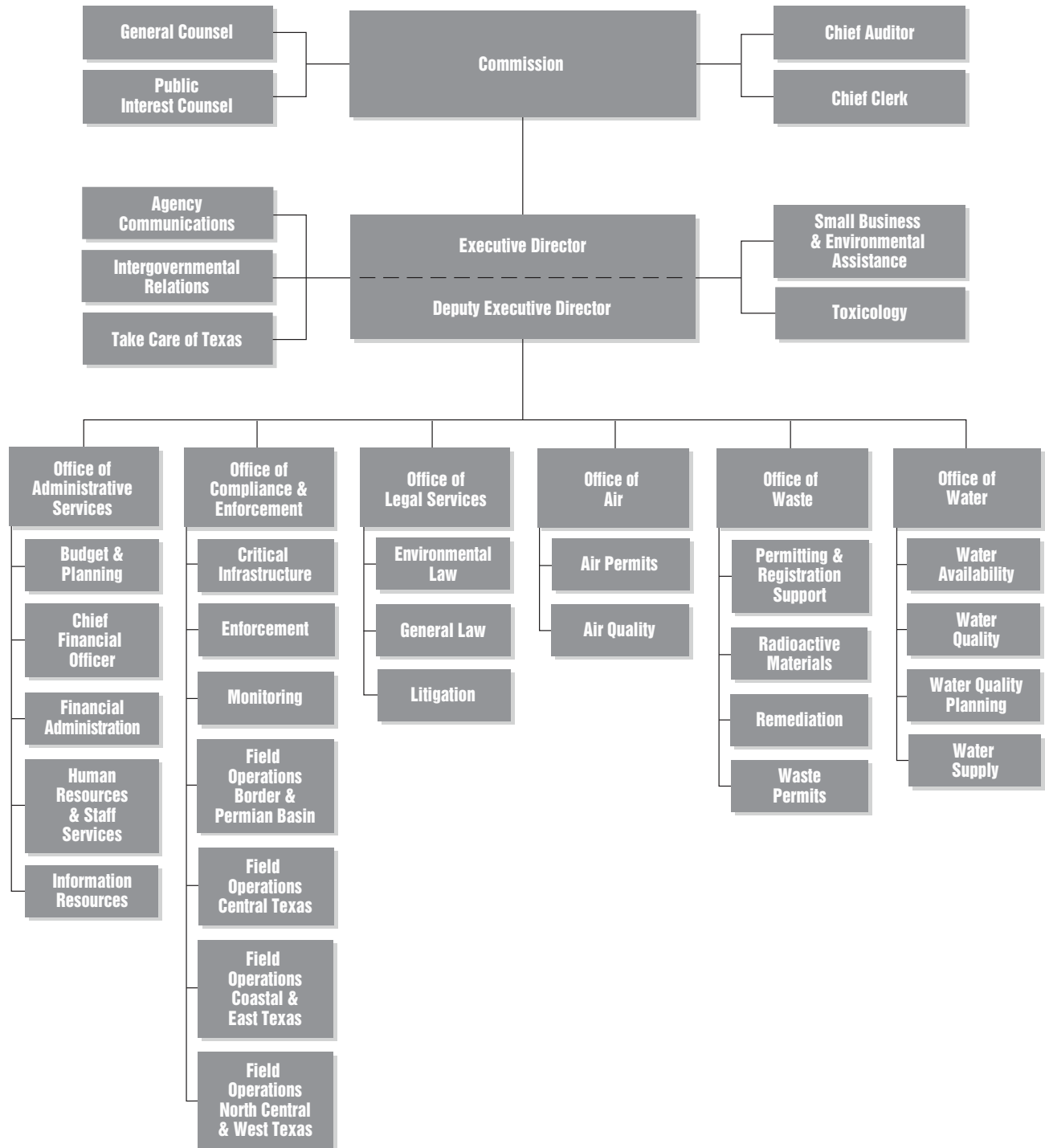
Planning Process

The Strategic Plan is developed with the support of the TCEQ commissioners and executive

management to ensure that agency policies address appropriate environmental protection and provide a cost-effective process to meet agency goals and objectives. Each agency office provides input into the external and internal assessment that is used to develop and maintain the goals, objectives, and strategies contained in this plan. Additionally, by improving and reporting on agency performance measures as accurately as possible, the TCEQ Strategic Plan is designed to communicate agency progress on efforts to ensure that all Texans are living in a safe environment.

A P P E N D I X B

TCEQ Organizational Chart



A P P E N D I X C

Outcome Projections, Fiscal Years 2015–2019

Goal/ Objective	Outcome Measures	Office	2015 Targeted	2016 Projected	2017 Projected	2018 Projected	2019 Projected
01-01.01	Annual percent of stationary and mobile source pollution reductions in ozone nonattainment areas	Air	3%	3%	3%	0%	0%
01-01.02	Nitrogen oxides (NO _x) emissions reduced through the Texas Emissions Reduction Plan (TERP)	Air	57.4 tons per day	47.8 tons per day	42.3 tons per day	39.2 tons per day	25.5 tons per day
01-01.03	Percent of Texans living where the air meets federal Air Quality Standards	Air	51%	50%	49%	100%	100%
01-01.04	Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state	Water	0.1%	0.1%	0.1%	0.1%	0.1%
01-01.05	Percent of Texas classified surface waters meeting or exceeding water quality standards	Water	62.9%	62.9%	62.9%	62.9%	62.9%
01-01.06	Annual percent of solid waste diverted from municipal solid waste landfills	Waste	4%	4%	4%	4%	4%
01-01.07	Annual percent decrease in the toxic releases in Texas	Toxicology	2%	2%	2%	2%	2%
01-01.08	Annual percent change in the amount of municipal solid waste going into Texas municipal solid waste landfills	Waste	2%	2%	2%	2%	2%
01-01.09	Percent of high- and significant-hazard dams inspected within the last five years	Compliance & Enforcement	100%	100%	100%	100%	100%

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Outcome Projections, Fiscal Years 2015–2019 (continued)

Goal/ Objective	Outcome Measures	Office	2015 Targeted	2016 Projected	2017 Projected	2018 Projected	2019 Projected
01-01.10	Number of acres of habitat created, restored, and protected through implementation of estuary action plans	Water	4,000	3,350	2,000	2,000	2,000
01-02.01	Percent of air quality permit applications reviewed within established time frames	Air	90%	90%	90%	90%	90%
01-02.02	Percent of water quality permit applications reviewed within established time frames	Water	90%	90%	90%	90%	90%
01-02.03	Percent of water rights permit applications reviewed within established time frames	Water	75%	75%	75%	75%	75%
01-02.04	Percent of waste management permit applications reviewed within established time frames	Waste	90%	90%	90%	90%	90%
02-01.01	Percent of Texas population served by public water systems that meet drinking water standards	Water	93%	95%	95%	95%	95%
02-01.02	Percent of Texas population served by public water systems protected by a program that prevents connection between potable and non-potable water sources	Water	95%	95%	95%	95%	95%
03-01.01	Percent of inspected or investigated air sites in compliance	Compliance & Enforcement	98%	98%	98%	98%	98%
03-01.02	Percent of inspected or investigated water sites and facilities in compliance	Compliance & Enforcement	97%	97%	97%	97%	97%

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Outcome Projections, Fiscal Years 2015–2019 (continued)

Goal/ Objective	Outcome Measures	Office	2015 Targeted	2016 Projected	2017 Projected	2018 Projected	2019 Projected
03-01.03	Percent of inspected or investigated waste sites in compliance	Compliance & Enforcement	97%	97%	97%	97%	97%
03-01.04	Percent of identified noncompliant sites and facilities for which timely and appropriate enforcement action is taken	Compliance & Enforcement	85%	85%	85%	85%	85%
03-01.05	Percent of investigated occupational licensees in compliance	Compliance & Enforcement	75%	75%	75%	75%	75%
03-01.06	Percent of administrative orders settled	Compliance & Enforcement	82%	82%	82%	82%	82%
03-01.07	Percent of administrative penalties collected	Compliance & Enforcement	80%	80%	80%	80%	80%
04-01.01	Percent of leaking petroleum storage tank sites cleaned up	Waste	93%	93%	93%	93%	93%
04-01.02	Total number of Superfund remedial actions completed	Waste	119	122	125	128	131
04-01.03	Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse	Waste	70%	75%	75%	75%	75%
04-01.04	Percent of industrial solid and municipal hazardous waste facilities cleaned up	Waste	63%	64%	64%	65%	65%
05-01.01	The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact	Water	40%	40%	40%	40%	40%

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Outcome Projections, Fiscal Years 2015–2019 (continued)

Goal/ Objective	Outcome Measures	Office	2015 Targeted	2016 Projected	2017 Projected	2018 Projected	2019 Projected
05-01.02	The percentage received of Texas' equitable share of quality water annually as apportioned by the Pecos River Compact	Water	100%	100%	100%	100%	100%
05-01.03	The percentage received of Texas' equitable share of quality water annually as apportioned by the Red River Compact	Water	100%	100%	100%	100%	100%
05-01.04	The percentage received of Texas' equitable share of quality water annually as apportioned by the Rio Grande Compact	Water	100%	100%	100%	100%	100%
05-01.05	The percentage received of Texas' equitable share of quality water annually as apportioned by the Sabine River Compact	Water	100%	100%	100%	100%	100%

TCEQ Performance Measures and Definitions, Fiscal Year 2016

At the time of this printing, these performance measures and definitions had not received formal approval from the Legislative Budget Board or the Governor's Office of Budget, Planning, and Policy.

The State of Texas uses a set of organized procedures known as the Strategic Planning and Budgeting System, in which funding and other decisions are based on what an agency is *accomplishing*, rather than just on what it is doing. As an important element of the monitoring phase of budgeting, *performance measures* serve as specific targets that indicate the level of success attained in accomplishing agency goals.

Performance Measures

There are four types of performance measures, as follows:

1. **Outcome Measures**—are used to assess an agency's effectiveness in serving its customers and in achieving its mission and goals. An outcome measure is typically expressed as a percentage, rate, or ratio.
2. **Output Measures**—are used to count the services and goods produced by an agency. They are helpful in assessing agency workload and demand for services as well as agency efforts to address those demands. The number of people receiving a service and the number of services delivered are often used as measures of output.
3. **Explanatory Measures**—reflect the agency's operating environment and explain factors that are relevant to the interpretation of other agency measures.
4. **Efficiency Measures**—are used to quantify costs, unit cost, or productivity associated with a given outcome or output.

Measure Definitions

The definition of a performance measure follows a format prescribed by the Texas Legislative Budget Board. This format has eight components, as follows:

1. **Short Definition**—provides a brief explanation of the measure, with enough detail to give a general understanding of it.
2. **Purpose/Importance**—describes the intended purpose of the measure and its significance.
3. **Source/Collection Data**—describes the source of the data or information and how it is collected.
4. **Method of Calculation**—clearly specifies how the measure is calculated.
5. **Data Limitations**—identifies any limitations and factors beyond the control of the agency that may affect reported performance.
6. **Calculation Type**—specifies whether the information is cumulative or non-cumulative from quarter to quarter.
7. **New Measure**—identifies whether the measure is new or has been significantly changed.
8. **Desired Performance**—clarifies whether the optimal level of performance is above, near, or below projections.



Performance Measures and Definitions

The following is a listing of the TCEQ's performance measures and their definitions for fiscal 2016.

Outcome 01-01.01 Annual percent of stationary- and mobile-source pollution reductions in ozone nonattainment areas

Short Definition: This measure quantifies changes in criteria pollutants or precursors for criteria pollutants from emission sources within an area that failed to meet the National Ambient Air Quality Standard for ozone.

Purpose/Importance: The measure reflects trends of ozone criteria pollutants and/or precursors in ozone nonattainment areas. These changes are potential indicators of strategies put in place to reduce emissions that will result in meeting ozone attainment status.

Source/Collection of Data: The sources of data include the annual inventory of major stationary point sources and the inventory of minor point sources and mobile sources that occurs every three years.

Method of Calculation: This measure is calculated by subtracting emissions data totals of the most recent emissions inventory from the total emissions figures of the previous year, divided by a base year emissions according to pollutant type. This measure is calculated on a calendar year (Jan. 1 through Dec. 31) basis because data cannot be quality-assured in a timely manner so that it is available on a fiscal-year basis.

Data Limitations: The lack of consistency between the current methods of conducting emissions inventories for major stationary point and minor stationary point and mobile emissions results in the inability to compile detailed annual trend analyses.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.02 Nitrogen oxides (NO_x) emissions reduced through the Texas Emissions Reduction Plan (TERP)

Short Definition: This measure is intended to show the amount of NO_x emissions reduced through implementation of the TERP incentive grants for cleaner on- and off-road heavy-duty engines.

Purpose/Importance: The TERP program was established by the 77th Legislature (Senate Bill 5) to offset emission reductions required of construction equipment operation and required accelerated purchase of cleaner diesel engines by providing incentives purchase or retrofit of cleaner on- and off-road diesel engines.

Source/Collection of Data: Emissions reduced is the difference between emissions estimated for current equipment and emissions from new purchase or retrofit equipment as reported by grant recipients over the life of the projects.

Method of Calculation: Tons per year NO_x reduced is generated by totaling the annual emissions reduction reported by each grant recipient. That number is divided by an estimated number of days in an operational year: either 250 or 365 days, depending on the type of project. The final amount is expressed as tons-per-day reductions.

Data Limitations: None identified; grant recipients are required to report emissions reduced by the funded projects.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.03 Percent of Texans living where the air meets federal Air Quality Standards

Short Definition: Percent of Texans living where the air meets federal Air Quality Standards.

Purpose/Importance: This measure reflects compliance with federal Air Quality Standards.

Source/Collection of Data: Population in counties in metropolitan areas that exceed federal air quality standards.

Method of Calculation: The percentage of Texas population in areas meeting federal clean air standards is measured by identifying the population within the counties in which the federal standards are being exceeded and subtracting this population figure from the statewide total population figure. This number is then divided by the total population and multiplied by 100 to derive a percentage. Population for Texas and Texas counties are taken from the most recent yearly population estimates released by the Texas State Data Center. This measure is calculated on a calendar year (Jan. 1 through Dec. 31) basis because data cannot be quality-assured in a timely manner so that it is available on a fiscal-year basis.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.04 Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state

Short Definition: Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state.

Purpose/Importance: This measure reflects the reduction in the pollution load from all facilities discharging to the waters of the state.

Source/Collection of Data: Using a TCEQ database maintained by the Water Quality Division, staff will report the total permitted pounds per day of the Five Day Biochemical Oxygen Demand (BOD5) or the Five Day Carbonaceous Biochemical Oxygen Demand (CBOD5) and the total permitted flow for the month of June of each year.

Method of Calculation: The total permitted pollution load from all facilities discharging to the waters of the state will be divided by the total permitted discharge flow to the waters of the state. The permitted pollution load will be subtracted from the previous year's permitted pollution load divided by the previous year's permitted pollution load, and multiplied by 100 to determine the percent reduction from the previous year.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.05 Percent of Texas classified surface waters meeting or exceeding water quality standards

Short Definition: Percent of Texas classified surface water meeting or exceeding water quality standards.

Purpose/Importance: This is a measure of the agency's success in developing and implementing state water quality management programs. The Texas Surface Water Quality Standards establish goals for water quality in the

surface waters of Texas. The extent to which water quality standards are attained is an environmental measure of water quality in Texas rivers, reservoirs, and estuaries, as well as a reflection of monitoring intensity.

Source/Collection of Data: The Surface Water Quality Information System Database has summary information on the water quality status for water bodies in Texas. The information is generated by comparing water sampling data collected by the agency and its cooperators with criteria for the classified water bodies established in the Texas Surface Water Quality Standards (30 TAC 307). Classified water bodies are the larger water bodies in Texas, and their watersheds are the focus of water quality management efforts. There are approximately 375 classified water bodies in Appendix A. Standards attainment is reported in TCEQ’s Texas Integrated Report for Clean Water Act, sections 305(b) and 303(d).

Method of Calculation: Summary totals reported in the Integrated Report express separately the percent of waters meeting water quality standards for rivers, reservoirs, and estuaries. For this calculation, the percent meeting or exceeding standards = “amount meeting” / “total amount assessed” times 100; where “total amount assessed” = “amount meeting” + “amount not meeting”. The amount is expressed as miles for rivers, acres for reservoirs, and square miles for estuaries. The overall percent of waters meeting standards for the state is then calculated as (% of rivers meeting standards + % of reservoirs meeting standards + % of estuaries meeting standards)/3.

Data Limitations: The Integrated Report is prepared in even years and staff is directed by the Commission to submit a draft document to the EPA for approval. This draft document is posted on the agency website and used for reporting and planning purposes as the “Commission-approved draft.” Compliance with water quality standards is based on the most recent sampling data typically for a period of seven years. The assessment integrates natural variability in water quality, and overall change in this measure, reflecting actual conditions, is relatively slow. Because the Integrated Report is updated only every two years, this measure remains constant for two years. If the EPA changes the requirement for the Integrated Report to a period other than every two years, the measure will also remain constant for that period of time.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Outcome 01-01.06 Annual percent of solid waste diverted from municipal solid waste landfills

Short Definition: The annual percent of solid waste diverted from municipal solid waste landfills in the state.

Purpose/Importance: To provide a general indicator of the effectiveness of statewide solid waste diversion and planning efforts.

Source/Collection of Data: Waste diversion data is obtained from the annual reporting program for municipal solid waste landfills.

Method of Calculation: The percent diverted is determined by the formula: total amount diverted / (total amount diverted + total amount disposed) × 100.

Data Limitations: This measure only captures data for solid waste that arrives at a landfill and is then diverted. It does not capture data for solid waste that is diverted before it gets to the landfill, such as local recycling programs. Economic factors and natural disasters are important but are not currently considered in the calculation.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.07 Annual percent decrease in the toxic releases in Texas

Short Definition: Annual percent decrease in the toxic releases in Texas.

Purpose/Importance: This measure reflects industry efforts to make reductions in their toxic releases.

Source/Collection of Data: Using the adjusted data reported in the annual Toxic Release Inventory, the amount of toxic releases during the reporting period, to air, land, and water will be subtracted from the previous year's level, and this difference will be divided by the previous year's level and multiplied by 100 to calculate the percent reduction.

Method of Calculation: Using the adjusted data reported in the annual Toxic Release Inventory, the amount of toxic releases during the reporting period, to air, land, and water will be subtracted from the previous year's level, and this difference will be divided by the previous year's level and multiplied by 100 to calculate the percent reduction.

Data Limitations: Data depends on the timely retrieval of information from the Toxic Release Inventory maintained by the EPA.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.08 Annual percent change in the amount of municipal solid waste going into Texas municipal solid waste landfills

Short Definition: Annual percent change in the amount of municipal solid waste going into Texas municipal solid waste landfills.

Purpose/Importance: This measure reflects recycling and conservation efforts to reduce the amount of solid waste going into Texas municipal solid waste landfills.

Source/Collection of Data: The disposal amount in tons is based on the most current set of complete data obtained through annual reports required for all permitted municipal solid waste landfills.

Method of Calculation: The percent change in the amount of waste going into Texas municipal solid waste landfills will be computed by subtracting the disposed amount in tons for the previous year from the disposed amount in tons for the reporting period. This difference will then be divided by the disposed amount in tons for the previous year and multiplied by 100 to determine the percent change.

Data Limitations: Due to the continued growth in population in the state, there will more than likely be an increase in municipal solid waste going to municipal solid waste landfills despite the best efforts to encourage recycling and reuse for some time to come.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Below projections.

Outcome 01-01.09 Percent of high- and significant-hazard dams inspected within the last five years

Short Definition: Percent of high- and significant-hazard dams that have had safety inspections performed within the last five years. Inspections include on-site investigations as well as in-house review of owner's engineer and contractor's inspection reports involving high- and significant-hazard dams.

Purpose/Importance: The inspections are conducted to ensure the safe design, construction, maintenance, repair, and removal of dams in the state. The percent of inspections conducted on high- and significant-hazard dams allows a comparison of state performance to federal program recommendations of inspections every five years.

Source/Collection: Dam Safety staff enter investigation information into the Dam Safety Module, which interfaces with several TCEQ databases, including the Consolidated Compliance and Enforcement Database (CCEDS).

Method of Calculation: Using information obtained by running queries of the data in CCEDS, performance is calculated using the following formula: (number of high- and significant-risk dams that have been inspected within the last five years / total number of high- and significant-risk dams) × 100.

Data Limitations: None.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.10 Number of acres of habitat created, restored, and protected through implementation of estuary action plans

Short Definition: Number of acres of habitat created, restored, and/or protected through implementation of Galveston Bay Estuary Program (GBEP) and Coastal Bend Bay Estuary Program (CBBEP) estuary action plans.

Purpose/Importance: Loss of habitat is one of the greatest threats facing the health of the Coastal Bend and Galveston Bay estuaries, designated by the EPA as estuaries of national significance. Habitat restoration and protection is critical for protecting significant fish and wildlife communities. Conservation areas, including wetlands, function to maintain water quality in the estuaries and surrounding tributaries. This measure must be reported by the estuary programs to the EPA and would be used in the future to express success of the Texas Coastal Management Program.

Source/Collection of Data: GBEP and CBBEP initiate and track habitat restoration projects within their established boundaries. These projects will be manually calculated for each program, added together, and reported by the Office of Water's Water Quality Planning Division.

Method of Calculation: Annual measure is determined by computing the area of habitat restored, created, or protected using aerial photography. Habitat types include tidal flats, inter-tidal marsh, freshwater and forested wetland, bird-nesting islands, coastal prairie, riparian, oyster reefs, and submerged aquatic vegetation. The measure is expressed in acres, inclusive of both wetland and upland areas.

Data Limitations: Actual acreage gained is influenced by changes in cost of land, availability of dredge material, changes in fuel cost, weather and partner monetary and in-kind contributions. Individual projections by GBEP and CBBEP will consider differences in land cost in the two geographical areas.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.01 Number of point-source air quality assessments

Short Definition: The number of industrial point-source emissions inventories containing National Ambient Air Quality Standards (NAAQS) criteria and toxic pollutants that are evaluated and entered into the State of Texas Air Reporting System (STARS) database.

Purpose/Importance: The measure reflects the number of emissions inventories submitted from industrial point sources in Texas and entered into the STARS database. The emissions inventory data are used for planning activities such as State Implementation Plans and are submitted to the EPA as required in the federal Clean Air Act of 1990 and they are also used for permit modeling, emissions fee verification, and compliance and enforcement activities.

Source/Collection of Data: Data are collected through point-source emissions inventories that are submitted annually to the Commission by entities that are subject to the emissions inventory reporting requirements.

Method of Calculation: The count of sources is based on the number of emissions inventories that are quality assured and entered into the STARS or other electronic database during each quarter of the fiscal year.

Data Limitations: Data is affected by the number of non-attainment areas in the state or by the NAAQS levels; should the number of non-attainment areas or the level or number of NAAQS change, the number of emissions inventories reviewed and entered will also change.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.02 Number of area-source air quality assessments

Short Definition: This assessment is based on the number of area-source categories for which emissions are inventoried or calculated by county and entered into a database.

Purpose/Importance: The measure reflects the number of area-source emissions inventories developed for each area-source category and the affected counties in the State of Texas. The emissions inventory data are used for planning activities such as State Implementation Plans and are submitted to the EPA as required in the federal Clean Air Act of 1990.

Source/Collection of Data: Area sources are defined as a wide variety of sources that generate air pollution but are too small and too numerous to identify individually. The emissions inventory data used for this measure is developed for area-source categories by making regional or county emissions estimates. The estimates are derived from either a “top-down” approach that applies an EPA-approved emission factor to a generic activity indicator such as county total population or a “bottom-up” approach that uses local area surveys or site inspection data for assessing processes and materials usage of individual categories. Each area-source emissions inventory is quality assured and loaded into the Texas Air Reporting (TexAER) database system.

Method of Calculation: The number of assessments is calculated by multiplying the number of emissions inventories developed for an area-source category by the number of counties with active sources.

Data Limitations: The variety in the level of work performed on any particular area-source category limits its usefulness as an easily measured output measure.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.03 Number of on-road mobile-source air quality assessments

Short Definition: This measure depicts the number of on-road mobile-source transportation-related scenarios evaluated by the Air Quality Division. On-road mobile sources include vehicles used on roads for transportation of passengers or freight for which emissions are estimated in tons of emissions per year and tons per ozone-season average weekday.

Purpose/Importance: On-road mobile sources in large urban areas make up a very significant source of air emissions. In some ozone non-attainment areas, they are considered the largest source of ozone-forming pollutants. Emissions from these sources are included in strategies associated with ozone non-attainment area State Implementation Plans. Assessments are also used to evaluate the impacts of different vehicle inspection/maintenance (I/M) programs, roadway construction projects, and transportation-control measures.

Source/Collection of Data: Assessment counts are dependent on Air Quality Division staff reporting. Emission calculations and assessments are dependent on the inputs to the MOBILE computer model used to develop emission factors, as well as on the travel activity applied to emission factors to calculate emissions. Variables assessed in different travel scenarios include measured vehicle miles of travel, speeds, fleet composition, fuels, controls in place, and other information pertinent to the area of concern. Much of the travel-related data is provided by transportation planning agencies, at both the state and local level.

Method of Calculation: EPA computer models are the primary tool used to calculate mobile-source emissions. A particular set of inputs to the model will constitute a specific scenario being modeled. Collecting the input data, setting up and running the model, and applying the vehicle activity to estimate emissions for that scenario is considered one assessment. The number of assessments reported is based on a quarterly summation of weekly staff counts of mobile scenarios run for each week.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.04 Number of non-road mobile-source air quality assessments

Short Definition: This assessment is the number of non-road mobile-source categories for which emissions inventories are developed by county and entered into a database by the Air Quality Division. Non-road mobile sources include mobile engines, mobile equipment, and vehicles used off road for construction, agriculture, transportation, recreation, and many other purposes. The emissions from these sources are expressed in tons per year and tons per ozone-season average weekday.

Purpose/Importance: The measure reflects the number of non-road mobile-source emission inventories developed for specific analysis years needed for State Implementation Plan (SIP) development and other analyses. The data is collected at the county level. Non-road mobile sources make up a very significant source of air emissions. Emissions from these sources are included in strategies associated with non-attainment area State Implementation Plans.

Source/Collection of Data: Data used for this measure will come from the number of non-road source categories for which emissions estimates are developed.

Method of Calculation: The measure is accounted for by staff reporting the number of non-road source categories within each geographic area for which emissions are developed during the reporting period.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.05 Number of air monitors operated

Short Definition: Number of air monitors operated.

Purpose/Importance: This measure provides an indication of the agency's ability to collect scientific data concerning the level of air pollutants to which Texas citizens are being exposed. The number of air monitors operated includes a count of the total number of individual monitors including ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, air toxics, lead, particulate matter of 10 microns or less, particulate matter of 2.5 microns or less, wind speed/direction, etc. A computerized file is maintained by the Field Operations Support Division which provides information on all monitoring sites.

Source/Collection of Data: The manager of the Texas air-monitoring networks maintains a computerized file of all air monitors operating at each monitoring site in the state. Deployment personnel provide a written record to the network manager each time they make any changes in equipment at any monitoring site. The manager then updates the computerized file to reflect the network changes.

Method of Calculation: The computerized file depicts a site description and a listing of the number of each type of monitor at each site. The file contains formulas that automatically recalculate each time an entry is updated or added. The formulas sum the number of each type of monitor and then sum the totals for each type of monitor to derive a total number of air monitors in operation. Each quarter, the computerized file is printed in hard copy and the totals are calculated manually to verify the accuracy of the computerized file.

Data Limitations: This measure provides a reliable indication of the state's air pollution monitoring capability. The number of air monitors in operation across the state is limited by funding and staffing levels as well as by equipment failures.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.06 Tons of NO_x reduced through the Texas Emissions Reduction Plan

Short Definition: This measure is intended to show the amount of NO_x emissions projected to be reduced through projects funded by TERP incentive grants awarded each year. Note that the corresponding Outcome Measure (01-01.02) then shows the results of the projects as reported each year.

Purpose/Importance: The TERP program was established by the 77th Legislature (Senate Bill 5) to offset emission reductions required of construction equipment operation and required accelerated purchase of cleaner diesel engines by providing incentives for the purchase or retrofit of cleaner on- and off-road diesel engines.

Source/Collection of Data: The grant applications include information that is used to calculate the number of tons of NO_x that will be reduced by that project.

Method of Calculation: The total tons projected to be reduced by each project are calculated using the methodologies established in the TCEQ's *Guidelines for Emissions Reduction Incentive Grants* (RG-388). The calculations are different for each type of projects. Only those projects funded under the TERP Emissions Reduction Incentive Grants (ERIG) and Rebate Grants Programs, as included in the guidelines, are included in the calculation.

Data Limitations: None identified; the calculations use data provided with the grant applications. The projected tons that will be reduced must be calculated in order to evaluate the project and make the grant award.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.07 Number of vehicles replaced and/or repaired through LIRAP assistance

Short Definition: Number of vehicle (units) repaired or replaced in the Low-Income Vehicle Repair Retrofit and Accelerated Retirement Assistance Program (LIRAP). The program is also known as Air Check Texas Drive A Clean Machine.

Purpose/Importance: This measure determines the number of vehicle repairs and replacements that have taken place in the program.

Source/Collection of Data: This measure is generated from quarterly reports gathered by each program county for each quarter.

Method of Calculation: The cumulative number of vehicle repairs and replacements in each participating county for each quarter.

Data Limitations: Quarterly reports submitted by each participating county are not due until 30 days after the end of each quarter. To meet the performance measure timeline established, data will be reported from electronic data available as of the close of the quarter from each participating county. The data will then be updated, if necessary, based on the final quarterly reports submitted by the participating counties.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-01-01.01 Percent of data collected by TCEQ continuous and non-continuous air-monitoring networks

Short Definition: Percent of data collected by TCEQ continuous and non-continuous air-monitoring networks.

Purpose/Importance: The percent of valid data collected by the TCEQ continuous and non-continuous air-monitoring networks allows a comparison of state performance to federal monitoring requirements.

Source/Collection of Data: Valid measurements are defined as measurements that meet federal monitoring criteria. Total possible measurements for continuous monitoring are defined as the number of samples that should theoretically be collected during the reporting period. Only TCEQ data will be reported in this measure, and the source of the data will be TCEQ's automated data collections systems for continuous data and TCEQ's non-continuous air-monitoring databases for non-continuous data. The data will be reported once it is validated for the entire quarter (for most data, this is the quarter after it is collected), and the sampling periods will be those described by federal regulations: January–March, April–June, July–September, and October–December.

Method of Calculation: The percentage of valid data collected for each pollutant will be determined by dividing the number of valid measurements by the total possible measurements, then multiplying by 100. The percent of valid data collected by the networks will be determined by summing the percentages of valid data collected for all pollutants measured and dividing by the number of pollutants measured.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-01-01.02 Average cost per air quality assessment

Short Definition: This measure accounts for the funds expended by the Air Quality Division on salaries and other operating expenses related to staff working on air quality assessments divided by the number of assessments performed during the period.

Purpose/Importance: This measure reflects agency efforts to produce air quality assessments in an efficient manner. It also relates operating expenses to a combination of three output measures; point-source assessments, area-source assessments and mobile-source assessments.

Source/Collection of Data: Operating expense data is taken from USAS reports for the Air Quality Division. The number of assessments for the period is compiled by staff in the Air Modeling and Data Analysis Section.

Method of Calculation: Using budgetary figures maintained by the Air Quality Division, this measure will be reported by: (1) identifying the total funds expended and encumbered through the reporting period of salaries and operating costs for staff performing air quality assessments; (2) collect and combine point, area, and mobile air quality assessment outputs; and (3) divide the total identified expenses by the total number of point-source, area-source, and mobile-source air quality assessments conducted during the reporting period to derive an average cost per assessment.

Data Limitations: Since the outputs used to calculate this measure are not reported from a computer data file but are dependent on staff recording and reporting the number of assessments conducted, the reporting process is time consuming and subject to large variation. The resources expended on assessments vary widely between the different types of assessments, and the work load for mobile- and area-source assessments is highly dependent on customer demand.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Efficiency 01-01-01.03 Average cost of LIRAP vehicle emissions repairs/retrofits

Short Definition: Average cost of repairs/retrofits to cars participating in the Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) that fail the vehicle emissions portion of the Inspection and Maintenance test.

Purpose/Importance: This measure seeks to provide a better understanding of the amount of funds a county might expect to allocate for vehicle repairs or retrofits.

Source/Collection of Data: This measure will be generated from quarterly reports gathered by each program county.

Method of Calculation: An average cost of LIRAP repairs and retrofits will be calculated each fiscal year by averaging data collected from participating county quarterly reports. Participating counties report monies allocated to each repair station for repairs and retrofits.

Data Limitations: Data is limited by the accuracy and efficiency of data reporting conducted by each program county.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Efficiency 01-01-01.04 Average cost per ton of NO_x reduced through the Texas Emissions Reduction Plan

Short Definition: This measure is intended to show the average cost per ton of NO_x emissions projected to be reduced through projects funded by TERP incentive grants awarded each year.

Purpose/Importance: The TERP program was established by the 77th Legislature (Senate Bill 5) to offset emission reductions required of construction equipment operation and required accelerated purchase of cleaner diesel engines by providing incentives for the purchase or retrofit of cleaner on- and off-road diesel engines.

Source/Collection of Data: The grant applications include information that is used to calculate the number of tons of NO_x that will be reduced by that project.

Method of Calculation: The total tons projected to be reduced by each project funded are divided by the incentive amount for that project. The total tons projected to be reduced by each project are calculated using the methodologies established in the TCEQ's *Guidelines for Emissions Reduction Incentive Grants* (RG-388). The calculations are different for each type of projects.

Data Limitations: None identified; the calculations use data provided with the grant applications. The projected tons that will be reduced must be calculated in order to evaluate the project and make the grant award. The total tons projected to be reduced by the projects funded each year will be divided by the total grant awards for that year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-01-01.01 Number of days ozone exceedances are recorded in Texas

Short Definition: The number of days that ozone standards are exceeded at one or more National Air Monitoring Site in any urban area.

Purpose/Importance: The measure reflects the frequency an urban area measures levels of ozone higher than the National Ambient Air Quality Standards.

Source/Collection of Data: This information is tracked using the TCEQ's air quality database.

Method of Calculation: The sum of days by urban area that the ozone standards are exceeded. Ozone exceedances will be monitored by the National Air Monitoring Site (NAMS) network. If more than one NAMS site in any urban area exceeds the standards on any given day, that day would only count once. The exceedances will be based on the NAAQS standard in place at the beginning of the fiscal year (to be updated as necessary) for ozone.

Data Limitations: The measure depends on which federal standard (8 hour or 1 hour) is in place. This work is performed as needed. There are no quotas for State Implementation Plan (SIP) modeling.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Output 01-01-02.01 Number of surface water assessments

Short Definition: Number of surface water assessments includes a diverse assemblage of assessment types performed and reported by multiple divisions within the Office of Water.

Purpose/Importance: The measure attempts to quantify the surface water quality assessment activities of the agency. Assessment of water quality is essential to the identification of impacted water bodies, and the development of water quality standards, effluent standards for wastewater discharges, and watershed strategies.

Source/Collection: Surface water assessments reported under this measure may be performed by TCEQ staff, contractors, or a combination of TCEQ staff and contractors. The Water Quality Division of the Office of Water (1) compiles and reports quarterly WQMP updates for new or amended projected effluent limitations, service area population and designated management agencies information for entities applying for the State Revolving Fund Loan, and proposed waste load allocations for new dischargers and revisions for Total Maximum Daily Load (TMDL) updates; and (2) performs Receiving Water Assessments.

The Water Quality Planning Division of the Office of Water performs and reports: (1) the CWA Sections 305(b) and 303(d) Integrated Report, including the Nonpoint Source Assessment; (2) Clean Rivers Program Assessments; (3) Water Quality Management Plans; (4) the CWA Section 319 Nonpoint Source Annual Report; (5) the CWA Section 319 Nonpoint Source Management Program; (6) Estuary Program Assessments finalized by either the Galveston Bay Estuary Program or the Coastal Bend Bays and Estuaries Program; (7) Use Attainability Analyses; (8) special studies supporting surface water quality assessment activities; and (9) TMDLs and TMDL I-Plans.

Method of Calculation: The assessments are tracked manually and reported by the Water Quality Planning Division along with any required explanation of variance from the projected performance of that division. Each assessment unit/parameter pair counts as one output for TMDLs, I-Plans, and TMDL equivalents. Each water body counts as one output for use-attainability analyses.

Data Limitations: The individual assessments included in the measure range from assessments requiring as little as one week to ten years to complete. Certain assessments come due every year, every other year, every five years, or every ten years. Some assessments are grant deliverables that occur only once, based on completion of the particular grant tasks. Other assessments, such as receiving water assessments and special studies, are performed as needed based on permitting demands for documentation of stream conditions, stream standards, and reasonable uses. Use-attainability analyses are performed as needed on individual water bodies when the existing standards appear to be inappropriate.

The water quality standards may be reviewed for water bodies listed as impaired under the Clean Water Act, 303(d), when deemed necessary through a permit action, when suggested by stakeholders, or as part of the triennial Surface Water Quality Standards review process. Depending on the complexity of the total maximum daily load assessment, development may require less than a year to greater than five years. Within the fiscal year, the performance for the number of surface water assessments varies from quarter to quarter based on demand and available resources. In general, water quality assessment activities are scheduled for completion later in the fiscal year.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-02.02 Number of groundwater assessments

Short Definition: Number of groundwater assessments. The reports completed evaluate environmental or programmatic data related to groundwater quality or quantity issues.

Purpose/Importance: The measure attempts to quantify the groundwater assessment activities of the agency. Assessments range in complexity and effort from a basic data report compiling and analyzing the results of a field sampling trip to a major report evaluating the water resources, future demand and recommended management strategies for a multi-county area. Assessment of groundwater quality and quantity issues is essential to the protection and conservation of limited groundwater resources.

Source/Collection: The Water Supply Division (WSD) of the Office of Water performs and reports groundwater quality assessments, regional groundwater vulnerability assessments, groundwater management program assessments, pesticides in groundwater assessments for a range of state and federal mandates.

Method of Calculation: The assessments will be tracked manually with completion recorded in an electronic database and reported to the Strategic Planning and Assessment Section by the respective division identified above along with any explanation of variance required. The number of assessments by Office and the total of all assessments are reported quarterly for the agency by the Strategic Planning and Assessment Section.

Data Limitations: The individual assessments included in the measure range from assessments requiring as little as one week to one year to complete. Certain assessments come due each year and some every other year. Some assessments address federal or state mandates that may vary little or greatly from one fiscal year to the next. Within the fiscal year, the performance for the number of assessments varies from quarter to quarter. A straight-line projection of performance cannot describe the assessment activities. As such, the distribution cannot be normalized over a given time frame.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-02.03 Number of dam safety assessments

Short Definition: Number of dam safety assessments conducted. Assessments include on-site investigations as well as in-house review of plans and specifications for dams, spillway adequacies, breach analyses, emergency action plans, engineering reports, water-use permit applications involving dams, and water district creation reviews involving dams.

Purpose/Importance: The measure reflects the combined workload of the agency and the agency's contractor associated with ensuring the safety of dams in the state. Assessments are conducted to ensure the safe design, construction, maintenance, repair and removal of dams in the state.

Source/Collection of Data: Using the Dam Safety Module—which interfaces with several TCEQ databases, including CCEDS—this measure is the total number of dam safety and security assessments completed in the reporting period.

Method of Calculation: Query of agency database.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projection.

Efficiency 01-01-02.01 Average cost per dam safety assessment

Short Definition: Average cost per dam safety assessment completed. Assessments include on-site safety and security investigations as well as in-house review of plans and specifications for dams, spillway adequacies, breach analyses, emergency action plans, engineering reports, and water-use permit applications involving dams, and water district creation reviews involving dams.

Purpose/Importance: Assessments are conducted to ensure the safe design, construction, maintenance, repair, and removal of dams in the state. The average cost measures how efficiently these assessments are conducted.

Source/Collection of Data: Investigators enter investigation information into the Dam Safety Module, which interfaces with several TCEQ databases, including CCEDS. Each reporting period, the Dam Safety Section retrieves from the database the number of assessments completed. USAS (unified statewide accounting system) expenditure figures for the Dam Safety Program are used to determine costs.

Method of Calculation: Database query retrieves the total number of assessments completed during the reporting period. Average cost per assessment is calculated by dividing total funds expended as reported in the USAS for the Dam Safety Program by the total number of dam safety assessments conducted through the reporting period.

Data Limitations: Average cost figures may vary considerably due to the number and complexity of assessments performed.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-01-02.01 Percent of Texas' rivers, streams, wetlands, and bays protected by site-specific water quality standards

Short Definition: Percent of Texas' rivers, streams, wetlands, and bays protected by site-specific water quality standards.

Purpose/Importance: The Texas Surface Water Quality Standards establish explicit numerical goals for water quality in the surface waters of Texas. The percentage of water bodies that have been assigned site-specific water quality standards is a measure of how well the standards have been tailored to individual water bodies and in the state. Using the Texas Water Quality Inventory, the percentage of state waters with designated site-specific standards is determined for each major water body type. These numbers are then averaged in order to develop a single statewide percentage. Calculated annually.

Source/Collection of Data: The TCEQ Texas Water Quality Inventory is used as a data source to provide the size of individual water bodies, and also to provide the total amount of each water body type in the state. The Water Quality Inventory is a publicly available document that is periodically reviewed and updated by the TCEQ. The Texas Surface Water Quality Standards, which are established as Chapter 307 in Title 30 of the Texas Administrative Code, are used to determine the list of water bodies that are assigned site-specific water quality standards.

Method of Calculation: For this measure, water body types are defined as rivers, reservoirs, estuaries, and wetlands. The amount of (area or length) of "classified" waters with site-specific standards is determined for each water body type from the Texas Water Quality Inventory (305(b) report). The length of partially classified streams is calculated from the current Texas Surface Water Quality Standards and added to the total of rivers with site-specific standards. The length of partially classified streams is calculated by multiplying the number of partially classified streams in Appendix D of the standards by the average length of these streams (8.0 miles).

To determine the total amount of each water body type in the state (classified and unclassified), information in the current Texas Water Quality Inventory is used as a baseline, except for reservoirs. For reservoirs, the total amount is based on the 1994 water quality inventory, since this total is not reported in more recent inventories. Newly constructed major reservoirs are added to the base total when they are completed. The percent of waters with standards is calculated for each water body type = $100 \times (\text{the amount of classified and partially classified waters} / \text{the total amount of that water body type})$. Then the percentages of each water body type with site-specific standards are averaged to obtain a single statewide percentage.

Data Limitations: The designation of water bodies with site-specific standards is typically revised every three years. Therefore, the rate of change of this measure is relatively slow.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-01-02.02 Number of dams in the Texas dam inventory

Short Definition: Number of dams in the Texas Dam Inventory.

Purpose/Importance: This measure reflects the number of dams in the state subject to dam safety assessments.

Source/Collection of Data: The Dam Safety Section will use information from field inspections, aerial photography, and new water-rights permit applications to maintain and update an existing database of approximately 7,250 dams. The database will be updated weekly by the additional listing of new dams and updated changes in the attributes of existing dams.

Method of Calculation: A query of the data maintained in state databases is run to obtain the number of existing dams.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-03.01 Number of active municipal solid waste landfill capacity assessments

Short Definition: The number of annual capacity assessments for active municipal solid waste landfills reviewed by the Waste Permits Division.

Purpose/Importance: To gather current and accurate landfill capacity data to assist in the development of regional solid waste management plans required by legislation (Chapter 363, Texas Health and Safety Code). This information is critical in determining whether sufficient disposal capacity exists to manage the quantity of municipal solid waste generated in the state.

Source/Collection of Data: Capacity-assessment forms are prepared and downloaded to the agency's website annually and notice regarding submittal deadline is sent to municipal solid waste landfills by the Waste Permits Division. Customers have the option to submit hard-copy reports or report through the agency's e-reporting system. All data will be entered into an agency database. Data will be reviewed for consistency with previously reported capacity data, as well as for consistency with related permit and fee data. The first quarter of the fiscal year is spent preparing the Annual Report form, preparing and sending out the report notice, and assisting customers with completion of the forms. The majority of reviews are performed in the second and third quarters. Preparation of the annual summary report occurs in the fourth quarter.

Method of Calculation: The measure is calculated by tallying the number of capacity-assessment reviews completed. A capacity-assessment review is considered completed when a report has been received and entered into the online report system, data has been checked for accuracy and compared with other data, and any discrepancies have been resolved.

Data Limitations: The number of capacity assessments depends wholly on the number of permitted landfills actively receiving waste in the state. This number may be affected by the issuance of new permits as well as by facility closures. Therefore, there may be some variance from the projected number of assessments.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-01-03.01 Average number of hours spent per municipal solid waste facility capacity assessment

Short Definition: Average number of hours spent per municipal solid waste facility capacity assessments.

Purpose/Importance: This measure reflects agency efforts to conduct municipal solid waste facility capacity assessments in an efficient manner.

Source/Collection of Data: The number of hours spent by the staff and management on gathering and evaluating municipal solid waste facility capacity assessments, evaluating the data, and preparing a statewide report on the data will be tracked. This is obtained by creating a program cost account (PCA) code that is used strictly for purposes of tracking this efficiency measure. The total number of hours charged monthly to this PCA code will be acquired through the USPS accounting system. Each quarter, the cumulative number of hours in the fiscal year charged to date to this PCA code will be divided by the total number of capacity assessments received in the fiscal year to date.

Method of Calculation: For the first quarter, the number of hours attributed to the PCA code created and strictly used for this project will be divided by the total number of capacity assessments received to date. The resulting hours per capacity assessments will be reported. For each of the following quarters, cumulative values for the number of hours attributed to the PCA code and the number of reports received will be used. By the fourth quarter, the efficiency on an annual basis has been determined.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-01-03.01 Number of council of government regions in the state with 10 years or more of disposal capacity

Short Definition: Of the 24 council of government (COG) regions in the state, the number with 10 years or more of projected municipal solid waste landfill capacity remaining.

Purpose/Importance: To identify those regions of the state with projected capacity to handle disposal needs for the next 10 years. Meeting this need may require more detailed solid waste management planning, possibly at the local level.

Source/Collection of Data: Capacity data are obtained through the annual reporting program for municipal solid waste landfills.

Method of Calculation: Capacity data entered into the program database is sorted geographically by COG region. Capacity is reported in cubic yards, and landfill compaction rates in pounds per cubic yard, as based on actual field measurements or on allowable estimation methods. With these data, capacity is then converted to tons. Landfill life expectancy in years for each COG region is then projected by dividing the capacity in tons by the number of tons disposed of in landfills during the annual reporting period. If results indicate a shortage of landfill capacity, staff reviews the anticipated capacity increases and/or disposal capacity utilized by a neighboring region. If analysis shows an actual shortage exists, the number is reported and planning is initiated.

Data Limitations: A number of landfills report capacity and compaction estimates rather than the results of actual field measurements. In addition, projected landfill life expectancies assume no changes in reported landfill size, disposal amounts, and compaction rates. Further, not all of total waste disposal is determined by actual scale weight, with much of waste disposal in the state determined by volume estimates.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.01 Percent of air quality permit applications reviewed within established time frames

Short Definition: The percentage of total air quality permit applications reviewed within respective time frames for various application categories; the measure considers applications for both New Source Review (NSR) and Title V permits.

Target time frames for NSR applications: new permits – 285 days; amendments – 315 days; new federal permits (such as, prevention of significant deterioration, non-attainment, 112[g] or 112[j]) and their major modifications – 365 days; permits by rule, standard permits without public notice, changes to qualified facilities, and relocations – 45 days; standard permits with public notice – 150 days; standard permits for concrete batch plant – 195 days; multiple plant permits – 330 days; alterations and other changes, de minimis requests – 120 days; renewals – 270 days; and maintenance, startup, shutdown (MSS) permits – 365 days.

Target time frames for Title V applications: site operating permits (SOP) initial issuance, revisions, and renewals – 365 days; SOP voids and operating permit (OP) notifications – 60 days; general operating permits (GOP) initial issuances – 120 days; GOP revisions – 330 days; GOP renewals – 210 days; and GOP voids – 60 days.

Target time frames will not apply to applications for which a hearing has been requested.

Purpose/Importance: This measure indicates the extent to which the Air Permits Division (APD) reviews air quality permit applications within established time frames. The time frames are based on permitting history and an evaluation of reasonable workload for permit-application reviewers.

Source/Collection of Data: The sources of data for this measure are APD's NSR and Title V Information Management Systems (IMS) databases. The data is retrieved by running the appropriate queries on the NSR and Title V Permits IMS databases.

Method of Calculation: The measure value is calculated by dividing the number of applications reviewed within the target time frame by the total number of applications reviewed. This procedure is conducted for all NSR and Title V application categories by queries on the NSR and Title V Permits IMS databases. The queries count each complete permit application and its respective number of days from the receipt date to the final action date. The processing times for each application are then compared to the respective target time frames, the number of applications processed within the target time frames is counted, and this number is then divided by the total number of applications to determine the percent of applications reviewed within the target time frames.

NSR applications are considered reviewed when the permit action is signed by the Executive Director (or designee), or when the application is considered void. Title V applications are considered reviewed when a grant letter or permit is signed by the Executive Director (or designee) of the TCEQ, or the date on which the Executive Director (or designee) takes action to deny or void the application, or when the applicant withdraws the application.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.02 Percent of water quality permit applications reviewed within established time frames

Short Definition: This measure includes non-contested wastewater permit applications. The percent of municipal and industrial wastewater permits reviewed within targeted time frames will be determined by dividing the number of applications reviewed within targeted time frames in that quarter by the total number of permits reviewed during that quarter and does not include contested permits or permits under additional review by the EPA. This information is tracked using databases administered in the wastewater permitting program. The targeted time frame for the review of municipal and industrial wastewater permits is established by statute, agency rules, or agency standard operating procedures.

Purpose/Importance: This measure indicates whether the agency is in compliance with established time frames for processing permit applications.

Source/Collection of Data: Staff enters all pertinent application information into the wastewater permitting databases as the application is processed. Staff queries this database and total the number of completed reviews within the fiscal year. Staff then subtracts the permit issuance date from the application received date to determine the review time for all reviews completed within the fiscal year.

Method of Calculation: The number of reviews completed within established time frames are summed and divided by the total number of reviews completed within the fiscal year. Staff then reports the percent of wastewater permits reviewed within established time frames to Strategic Planning and Assessment.

Data Limitations: Applications are excluded from the count when suspended from processing in accordance with either agency rules or agency policy.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.03 Percent of water-rights permit applications reviewed within established time frames

Short Definition: This measure includes non-contested water-rights permit applications. The percent of water rights permit applications reviewed within targeted time frames will be determined by dividing the number of applications reviewed within the targeted time frame by the total number of permits issued in the fiscal year. This information is tracked using water-rights databases. The targeted time frame for the review of water rights permits is established by statute, agency rules or agency standard operating procedures.

Purpose/Importance: This measure indicates to what extent the Water Availability Supply Division's staff is in compliance in processing permit applications within established time frames.

Source/Collection of Data: Staff enters all pertinent application information into the water-rights permitting databases as the application is processed. Staff queries this database and total the number of completed reviews within the fiscal year. Staff then subtracts the completed date from the date of receipt to determine the review time for all reviews completed within the fiscal year.

Method of Calculation: The number of reviews completed within established time frames are summed and divided by the total number of reviews completed. Staff then reports the percent of water-rights permits reviewed within established time frames to Strategic Planning and Assessment.

Data Limitations: Applications are excluded from the count when suspended from processing in accordance with either agency rules or agency policy.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.04 Percent of waste management permit applications reviewed within established time frames

Short Definition: Percent of waste management permit applications reviewed within established time frames.

Purpose/Importance: This measure reports whether the agency is in compliance with established time frames for reviewing permit applications.

Source/Collection of Data: Using an automated tracking system maintained by the Office of Waste, this measure will track the number of waste permit applications reviewed during the fiscal year and the number of waste permit applications that were reviewed within the prescribed agency time frames during the fiscal year. An application is considered reviewed upon: transmittal of the final draft permit from the program to the Chief Clerk's Office for completion of other final actions or the return/withdrawal of the application to the applicant either at the applicant's request or as the result of administrative or technical deficiencies.

The percent of waste permit applications reviewed will be derived by dividing the total number of waste permit applications reviewed within the target time frames by the total number of waste permit applications reviewed for the fiscal year.

This process will be completed on the following waste permit applications: (1) new, renewals, major and minor amendments, and Class 1, Class 1ED, Class 2, or Class 3 modifications, and post closure orders for industrial nonhazardous solid waste facilities and hazardous waste treatment, storage, and disposal facilities, (2) regulatory flexibility orders for hazardous waste treatment, storage and disposal facilities and industrial nonhazardous waste facilities, (3) new, renewals, major and minor amendments, and minor modifications for UIC Class I Injection Well and Class III Injection Wells, (4) authorizations and new permits and revisions for UIC Class IV and V Injection Wells, (5) new, registrations, major and minor amendments, and notice and no-notice modifications for municipal solid waste, and (6) new, renewals, and major and minor amendments for radioactive material licenses and disposal.

Method of Calculation: Query agency databases for the number of applications reviewed and determine those reviewed within established time frames. Express as a percentage.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-01.01 Number of state and federal new source review air quality permit applications reviewed

Short Definition: The total number of new permits, permit amendments, permit alterations, and permit-by-rule applications reviewed under the Texas Clean Air Act and the federal NSR permitting programs (*see additional detail, next section).

Purpose/Importance: This measure quantifies the permitting workload of the Air Permits Division staff assigned to review state and federal new source review permit applications. *The count includes those applications that are withdrawn or denied, and which therefore do not result in permit approval or issuance. Application types

in this count include General Permits, Standard Permits, Flexible Permits, and federal Prevention of Significant Deterioration (PSD) and Non-Attainment Area (NAA) permits.

Source/Collection of Data: The source of the data for this measure is the NSR Permits Information Management System (IMS) database. An entry for each project is created in the database when the project is received in the Air Permits Division. Application reviewers are responsible for tracking certain elements of their assigned projects' progress through the review process, and ensuring that these tracking elements are entered into the database by data entry staff. Data entry for each project is closed at the time the project is approved, issued, denied, or withdrawn. Completion of the review process occurs when permits are signed by the Executive Director (or designee) of the TCEQ, or when the application is considered void.

Method of Calculation: The measure value is calculated as the sum of the total number of applications for new permits, permit amendments, permit alterations and permit-by-rule registrations reviewed by the Air Permits Division. The necessary data is retrieved by query of the NSR IMS.

Data Limitations: A potential limitation of data accuracy is the time lag between completion of a project and the entry of the completion tracking elements into the database. Generally, this time lag is less than one week.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-01.02 Number of federal air quality operating permits reviewed

Short Definition: The total number of applications for federal air quality operating permits reviewed under Title V of the federal Clean Air Act (CAA) (see additional detail, next section).

Purpose/Importance: This measure quantifies the permitting workload of the Air Permits Division staff assigned to review federal operating permit applications. *This count includes those applications that are withdrawn, voided, or denied and which therefore do not result in permit authorization, approval, or issuance.

Source/Collection of Data: The source of the data for this measure is the Title V Information Management System (IMS) database. An entry for each project is created in the database when the project is received in the Air Permits Division. Application reviewers are responsible for tracking certain elements of their assigned projects' progress through the review process, and ensuring that these tracking elements are entered into the database. Data entry for each project is closed when the project is approved, issued, denied, voided or withdrawn. Completion of the review process occurs when grant letters (GOP) and permits (SOP) are signed by the Executive Director (or designee) of the TCEQ, when the Executive Director (or designee) takes action to deny or void the application, or when the applicant withdraws the application.

Method of Calculation: The measure value is calculated as the sum of the total number of applications for federal air quality operating permits reviewed under Title V of the CAA. The necessary data is retrieved by query of the Title V IMS.

Data Limitations: A potential limitation of data accuracy is the time lag between completion of a project element and the entry of the completed tracking elements into the database. Generally, this time lag is less than one week.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-01.03 Number of Emissions Banking and Trading transaction applications reviewed

Short Definition: The total number of Emissions Banking and Trading (EBT) transaction applications for the Emission Reduction Credits, Discrete Emission Reduction Credits, Mass Emissions Cap and Trade, Emissions Banking and Trading of Allowances, and Highly Reactive Volatile Organic Compound Emissions Cap and Trade programs reviewed by the Air Quality Division (*see additional detail next section).

Purpose/Importance: This measure quantifies the EBT workload of the Air Quality Division staff assigned to review EBT applications. *This count includes those applications that are withdrawn or denied, and which therefore do not result in transaction approval or credit issuance. Application types include emission credit and discrete emission credit certifications, emission credit and discrete emission credit notices of intent to use, cap and trade level of activity certifications, cap and trade annual reports, and credit/allowance transfers.

Source/Collection of Data: The source of data for this measure is the Emission Banking and Trading information management system database. An entry for each project is created in the database when the project is received in the Air Quality Division. Application reviewers are responsible for tracking certain elements of their assigned projects' progress through the review process, and ensuring that these tracking elements are entered into the database by data entry staff. Data entry for each project is closed at the time the project is approved, denied, withdrawn, or issued. The data is retrieved by running a query on the EBT database.

Method of Calculation: This measure is calculated as the sum of the total number of EBT transactions applications for the period of interest.

Data Limitations: A potential limitation to data accuracy is the time lag between completion of a project and the entry of the completion tracking elements into the database. Generally, this time lag is less than one week.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-01.01 Number of state and federal air quality permits issued

Short Definition: The number of state and federal new source review (NSR) air quality permits that were actually issued or approved. For purposes of NSR permits, "issued" means the Executive Director (or designee) of the TCEQ has signed the permits.

Purpose/Importance: This measure quantifies those NSR air quality permits applications, reviewed under the Texas Clean Air Act and the federal NSR permitting programs, which resulted in issued or approved permits.

Source/Collection of Data: The source of data for this measure is the NSR Permits Information Management System (IMS) database. The data is retrieved by running a query on the NSR IMS.

Method of Calculation: The measure value is calculated as the sum of the state and federal NSR permits issued or approved during the reporting period.

Data Limitations: A potential limitation of the data is the time lag between completion of a project element and the entry of the tracking element into the database. Generally, this time lag is less than one week.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-01.02 Number of federal air quality permits issued

Short Definition: The number of federal air quality operating permits reviewed under Title V of the federal Clean Air Act (CAA) that was actually issued. For purposes of operating permits, “issued” means EPA review has been completed, and the Executive Director (or designee) has signed the grant letters and/or permits.

Purpose/Importance: This measure quantifies those federal air quality operating permits applications, reviewed under Title V of the CAA, which resulted in issued or approved permits.

Source/Collection of Data: The source of the data for this measure is the Title V Permits Information Management System (IMS) database. The data is retrieved by running a query on the Title V Permits IMS.

Method of Calculation: The measure value is calculated as the sum of the number of federal operating permits issued or approved during the reporting period.

Data Limitations: A potential limitation of the data is the time lag between completion of a project element and the entry of the tracking element into the database. Generally, this time lag is less than one week.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-02.01 Number of applications to address water quality impacts reviewed

Short Definition: Number of applications to address water quality impacts reviewed.

Purpose/Importance: This measure reflects agency workload with regard to the review of water quality permit applications.

Source/Collection of Data: The Wastewater Permitting Section will provide a number each reporting period that identifies the number of municipal and industrial wastewater permits it has drafted and filed with the Chief Clerk for public notice. Filing of draft permits with the Chief Clerk denotes completion of the program review process. This information is tracked on databases within the Wastewater Permitting Section.

The total number of sewage sludge beneficial use registrations and permits, sewage sludge process and/or disposal permits, and water treatment sludge land application registrations and/or disposal permits will be included. In addition, the total number of general permits Notice of Intent (NOI), No Exposure Certifications (NECs), and Erosivity Waivers processed will be included. The mailing of the confirmation letter to the applicant denotes the completion of the program review. This measure does not include authorizations by rule or pretreatment audits.

In addition to the information provided by the Wastewater Permitting Section, this measure will include Edwards Aquifer (EA) protection plans reviewed and applications reviewed for on-site sewage facilities (OSSF) by the Field Operations Support Division (FOSD). This information will be based on EA plan reviews that are completed and entered into CCEDS during the reporting period and OSSF applications that are reviewed during the reporting period.

Method of Calculation: The wastewater permitting section provides data from their database and the Field Operations Support division provides their data to the Wastewater Permitting Section. These two numbers are added together to provide the number of applications reviewed.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-02.02 Number of applications to address water-rights impacts reviewed

Short Definition: This measure is the number of permitting action reviews completed and is calculated by totaling the number of water-rights applications, ownership transfers, temporary permits by Water Rights and regional staff, and water supply contracts processed and reviewed during the reporting period.

Purpose/Importance: This measure reflects agency workload with regard to the review of water rights permit applications.

Source/Collection of Data: Water Rights Permitting staff enter milestone information into databases. Staff queries these databases for application reviews completed this quarter and reviews monthly activity reports for ownership changes and supply contracts. The numbers reported by Water Rights Permitting do not include Region numbers. The Field Operations Support Division provides data to the Water Supply Division.

Method of Calculation: Applications completed this quarter are summed together with ownership changes and contracts as reported in monthly activity reports.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-02.03 Number of concentrated animal feeding operation (CAFO) authorizations reviewed

Short Definition: Number of concentrated animal feeding operation (CAFO) authorizations reviewed.

Purpose/Importance: This measure reflects agency workload with regard to processing CAFO authorizations.

Source/Collection of Data: Using information maintained by the Water Quality Assessment Section, this measure will be reported at the end of each quarter by calculating the total number of concentrated animal feeding operation individual permits and Notices of Intent (NOIs) for coverage under the general permit reviewed/processed by the staff. Transmittal of reviewed applications from the program to the Chief Clerk's Office denotes process completed by the program. The mailing of the confirmation letter to the applicant for NOIs submitted for coverage under the general permit denotes the completion of the program review.

Method of Calculation: Using information maintained on the PARIS database for individual permits and the ARTS database for NOIs, this measure will be reported at the end of each quarter by calculating the total number of concentrated animal feeding operation permits reviewed by the staff and the total number of confirmation letters mailed for coverage under the general permit. Transmittal of reviewed applications from the program to the Chief Clerk's Office denotes process completed by the program.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-02.01 Number of water quality permits issued

Short Definition: This measure will report the total number of water quality permits approved by the Executive Director or by the Commissioners.

Purpose/Importance: To report the number of TPDES, State, and Agricultural permits issued for the year.

Source/Collection of Data: This information is tracked in a database maintained by the Chief Clerk's Office.

Method of Calculation: This information is pulled from the database maintained in the Chief Clerk’s Office and is supplied by a query to the database by the date the permit was signed.

Data Limitations: None Identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-02.02 Number of water-rights permits issued

Short Definition: This measure will report the total number of water-rights permits approved by the Executive Director or by the Commissioners.

Purpose/Importance: To report the number of water-rights permits issued for the year.

Source/Collection of Data: This information is tracked in a database maintained by the Water Rights Permitting and Availability Section.

Method of Calculation: This information is pulled from the database maintained in the Water Rights Permitting and Availability Section and is supplied by a query to the database by the date the permit was signed.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-03.01 Number of new system waste evaluations conducted

Short Definition: Audits conducted on generators’ self-classification of their industrial waste.

Purpose/Importance: That wastes are correctly classified to ensure appropriate management, disposal, and fee assessment.

Source/Collection of Data: The data are collected through the waste stream notifications submitted by waste generators regulated by the TCEQ. In the case of out-of-state wastes written submissions from the generators are used. Waste streams are audited on a random basis or manually selected from a database maintained by the Waste Permits Division when there is sufficient information to suspect the wastes were classified incorrectly.

Method of Calculation: On a monthly basis the total number of completed audits is maintained in a division spreadsheet. On a quarterly basis the total is derived, reconciled against information from the division maintained database, and reported. Audits are considered complete when: (1) the auditee submits sufficient data for the TCEQ to review, and (2) the TCEQ has sufficient time to complete the review.

Data Limitations: Data could be affected by lack of response from generators or incorrect written submissions received from the generators.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-03.02 Number of non-hazardous waste permit applications reviewed

Short Definition: Number of non-hazardous waste permit applications and other authorizations reviewed. This includes the number of permit and registration application reviews for new, modified, or amended MSW storage, treatment, and processing permits, which includes recycling and disposal facilities and renewed or

amended commercial industrial non-hazardous waste landfill (CINWL) facilities. This also includes the number of notifications and other authorizations reviewed.

Purpose/Importance: This measure quantifies the number of reviews conducted to ensure that proposed facilities meet design and operational requirements and are protective of human health and the environment.

Source/Collection of Data: Information regarding the status of individual MSW or CINWL permit applications is maintained in a database maintained by the Waste Permits Division. Date of review of a permit is entered into the database by a TCEQ staff member when a permit application is deemed technically complete.

Using an agency database maintained by the Waste Permits Division, this measure will calculate the total of (1) the number of final draft permits for new, modified, and/or amended municipal solid waste storage, treatment, and disposal facilities; (2) the number of final draft permits for new, renewed, and/or amended commercial industrial non-hazardous waste landfill facilities; (3) the number of technical completions prepared for municipal solid waste and commercial industrial non-hazardous waste landfills; (4) the number of municipal solid waste and commercial industrial non-hazardous waste landfill applications denied and withdrawn by the Commission; (5) the number of new and modified MSW registrations; and (6) the number of notifications and other authorizations acknowledged.

Method of Calculation: Totals are calculated by adding the numbers for each category together. For permit and registration applications, review is considered complete upon issuance of the final draft permit or registration. For modifications, completion of review is upon final draft modification or final action as appropriate for the type of modification. For notifications and other authorizations, review is considered complete upon issuance of the acknowledgement letter.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 01-02-03.03 Number of hazardous waste permit applications reviewed

Short Definition: Number of permits, orders, licenses, and authorizations reviewed, denied, or withdrawn. Includes all permitting and authorization actions for hazardous waste facilities and industrial non-hazardous waste storage and processing facilities (new, renewed, major and minor amendments, modifications (Class 1, Class 1 with prior approval of the Executive Director (Class 1 ED), Class 2, and Class 3), post closure care orders and regulatory flexibility orders and Class I, Class III, Class V Underground Injection Control (UIC) wells (new, renewed, major and minor amendments, minor modifications, and regulatory flexibility orders), and radioactive-material facilities (new, renewed, and major and minor amendments).

Purpose/Importance: This measure quantifies the number of environmentally protective authorizations recommended by the TCEQ staff.

Source/Collection of Data: Using an agency database maintained by the Waste Permits Division, this measure will calculate the total of (1) the number of final draft permits/orders for new, renewals, major and minor amendments, Class 1ED, 2, 3 modifications, regulatory flexibility orders, and post closure care orders for hazardous and industrial waste storage, treatment and disposal facilities; (2) the number of Class 1 modifications for hazardous and industrial waste storage, treatment, and disposal facilities; (3) the number of final draft permits for new, renewed, amended and modified underground injection control wells; (4) the number of new and amended authorizations for underground injection control wells; and (5) the number of applications returned and/or withdrawn.

A reviewed application is defined as: transmittal of the final draft permit, license, or order from the program to the Chief Clerk's Office, the return/withdrawal of the application to the applicant either by the applicant's request or as the result of administrative or technical deficiencies, or the transmittal of an authorization or modification letter to the applicant. Data maintained in the database includes the facility name, identification number, date application is received, and date reviewed, or returned/withdrawn prior to final draft permit, or date of authorization or modification letter. Data is entered after the action has occurred. A reviewed application is defined as an application received and the transmittal of the final draft permit from the program to the Office of Chief Clerk or transmittal to the company of an authorization, modification letter or rejection letter.

Method of Calculation: Totals are calculated by adding the number of reviewed items together.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-03.01 Number of non-hazardous waste permits issued

Short Definition: Number of non-hazardous waste permits issued.

Purpose/Importance: This measure reflects agency workload with regard to the number of permits issued. This measure quantifies the number of permits issued for facilities that are protective of human health and the environment.

Source/Collection of Data: Using an agency database maintained by the Waste Permits Division, this measure will be reported by calculating the number of permits and registrations issued or notifications and other authorizations acknowledged for municipal facilities and commercial industrial nonhazardous waste landfill facilities in the fiscal year. A permit issued is one that has been signed by either the Executive Director (or designated representative) or by the Commission. Date of issuance of a permit is entered into the database by the TCEQ staff member when a copy of the issued permit is received by the Waste Permits Division from the Chief Clerk's Office. Date of the notification or other authorization acknowledged is entered into the database when the notification or other authorization is acknowledged by letter and assigned a notification or authorization number.

Method of Calculation: Query agency databases for reported performance. Totals are calculated by adding the numbers of issued permits, registrations, modifications, and amendments.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 01-02-03.02 Number of hazardous waste permits issued

Short Definition: Number of hazardous waste permits or orders; industrial non-hazardous waste storage and processing permits or orders; UIC permits, orders, and authorizations.

Purpose/Importance: This measure reflects agency workload with regard to the number of permits/orders/authorizations issued.

Source/Collection of Data: Using an agency database maintained by the Office of Waste, this measure will be reported by calculating the number of permits, orders, and authorizations issued for hazardous waste facilities,

industrial non-hazardous storage and processing waste facilities, UIC Class I injection wells, UIC Class III injection wells, and UIC Class V injection wells. A permit, order, or authorization issued is one that has been signed by either the Executive Director (or designated representative) or by the Commission.

Method of Calculation: Query agency database for reported performance. Totals are calculated by adding the numbers of issued permits, orders, and authorizations.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-03.03 Number of corrective actions implemented by responsible parties for solid waste sites

Short Definition: Number of corrective actions at non-hazardous solid waste landfills.

Purpose/Importance: This measure reflects the number of corrective actions being performed by responsible parties to remediate releases from municipal solid waste and commercial industrial non-hazardous waste landfills.

Source/Collection of Data: Using an agency tracking system and manual record reviews maintained by the Waste Permits Division, this measure will be reported by calculating the number of municipal solid waste and commercial industrial non-hazardous waste landfill facility corrective action plans received and reviewed by staff, then implemented by responsible parties in accordance with their approved plans during the reporting period. This includes all corrective action activities (including groundwater and landfill gas remediation) at permitted municipal solid waste and commercial industrial non-hazardous waste landfill facilities. A corrective action is considered complete upon issuance of a letter by the agency to the responsible party indicating approval of corrective-action activities.

Method of Calculation: Query agency database and verify results with appropriate project managers.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-04.01 Number of applications for occupational licensing

Short Definition: The number of individual applications for environmental professional licensure and registration that are received by the agency and are entered into the Consolidated Compliance and Enforcement Data System (CCEDS), and either issued a license, a deficiency letter, or a failure letter during the reporting period.

Purpose/Importance: This measure indicates the number of new and renewal applications received. It is a primary measure of workload and it indicates the number of potential licensed or registered professionals or companies.

Source/Collection of Data: The Permitting and Registration Support Division staff scans or manually enters data into the CCEDS for the applications received during this period.

Method of Calculation: This measure is calculated by running a query of CCEDS of all applications for environmental professional licensure and registration received by the agency during the reporting period.

Data Limitations: Receiving some applications at the central office may be dependent on the designated agents submitting them timely.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-04.02 Number of examinations processed

Short Definition: The number of individual examinations received by the agency and entered into the Consolidated Compliance and Enforcement Data System (CCEDS) for processing.

Purpose/Importance: This measure indicates the number of exams administered to applicants who are potential licensees.

Source/Collection of Data: The Permitting and Registration Support Division staff scans or enters exam information into the Consolidated Compliance and Enforcement Data System (CCEDS) after examinations are administered by the commission’s designated agents, the Permitting and Registration Support Division, and Field Operations Support Division staff.

Method of Calculation: This measure is calculated by running a query of CCEDS for all examinations processed during the reporting period.

Data Limitations: Receiving the examinations at the central office for processing is dependent on the designated agents submitting it timely.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-04.03 Number of licenses and registrations issued

Short Definition: The number of new, newly upgraded, or renewed licenses and registrations issued to individuals and companies during the reporting period.

Purpose/Importance: This measure indicates the number of licenses that were issued or renewed for individuals and companies who have met licensing or registration requirements.

Source/Collection of Data: The Permitting and Registration Support Division staff generates certificates and licenses for qualified applicants and maintain this information in the Consolidated Compliance and Enforcement Data System (CCEDS).

Method of Calculation: This measure is calculated by running a query of the CCEDS database for new, newly upgraded, or renewed licenses and registrations issued to individuals and companies during the reporting period.

Data Limitations: Licensed individuals and companies may have change of addresses that go unreported to the agency. This may result in the loss of the license or registration due to failure to renew.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-02-04.01 Average annualized cost per license and registration

Short Definition: The average annualized cost per license and registration.

Purpose/Importance: Reflects average annualized cost for the licensing program per number of active licenses and registrations maintained by the agency.

Source/Collection of Data: The Operator Licensing Section annual budget is obtained from USAS. The licensing and registration data is maintained in the Consolidated Compliance and Enforcement Data System (CCEDS).

Method of Calculation: This measure is calculated by dividing the Operator Licensing Section total annual salary budget by the total number of licensees/registrants in force by the agency at the end of the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-02-04.01 Number of TCEQ licensed environmental professionals and registered companies

Short Definition: The total number of environmental professional licenses and registrations currently registered with the agency.

Purpose/Importance: This measure presents the order of magnitude of the TCEQ licensing programs. It provides basic information for workload evaluation.

Source/Collection of Data: The Permitting and Registration Support Division maintains this information in the Consolidated Compliance and Enforcement Data System.

Method of Calculation: This measure is calculated by querying CCEDS for all active licenses and registrations.

Data Limitations: None.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-03-01.01 Number of radiological monitoring and verification samples of air, water, soil, and fauna collected

Short Definition: The number of radiological monitoring and verification samples of air, water, soil/sediment, and flora collected to address and evaluate any threat to human health and safety and the environment and/or to initiate a quality-control check on licensees' monitoring program.

Purpose/Importance: This measure provides an indication of the number of actual samples taken by the agency to be analyzed for early warning of the migration and/or past movement of radiological constituents from regulated activities to protect human health and safety and the environment.

Source/Collection of Data: This measure will use an agency database or other data storage to track all samples taken by staff during inspections, confirmatory surveys, reclamation confirmations, and any other environmental monitoring and sampling events.

Method of Calculation: Using an agency database maintained by the Radioactive Materials Division, at the end of each quarter, the total number of samples taken during that quarter is determined. The total for each quarter is added to the total for any previous quarters during that fiscal year to come up with a cumulative total of samples taken during that fiscal year.

Data Limitations: None known at this time.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-03-01.01 Total annual amount of revenue deposited to the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive waste and other radioactive substances

Short Definition: The total annual amount of revenue received by the TCEQ and deposited into the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive and other radioactive substances at any Texas disposal facility.

Purpose/Importance: This measure provides an indication of the gross receipts of private, commercial operations that are accepting radioactive substances, and specifically low-level radioactive waste, from others for permanent disposal within the boundaries of the State of Texas.

Source/Collection of Data: This measure will use an agency database to track all revenue received by the TCEQ and deposited into the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive waste and other radioactive substances at any Texas disposal facility.

Method of Calculation: Using an agency database maintained by the Radioactive Materials Division and information from the Revenues Section of the Financial Administration Division, at the end of each quarter, the total of deposits made during that quarter is determined. The total for each quarter is added to the total for any previous quarters during that fiscal year to come up with a cumulative total deposited during that fiscal year.

Data Limitations: None known at this time.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-03-01.02 Volume of low-level radioactive waste accepted by the State of Texas for disposal at the Texas Compact Waste Facility

Short Definition: The total volume of low-level radioactive waste accepted by the State of Texas for disposal at the Texas Compact Waste Facility.

Purpose/Importance: This measure provides an indication of the total volume of low-level radioactive waste arriving in shipments at the Compact Waste Disposal Facility, taken title of by the TCEQ on behalf of the State of Texas, and subsequently permanently disposed of in the state-owned facility.

Source/Collection of Data: This measure will use an agency database to track all material received.

Method of Calculation: Using an agency database maintained by the Radioactive Materials Division, at the end of each quarter, the total volume accepted by the State of Texas for disposal at the Texas Compact Waste Facility during that quarter is determined. The total volume for each quarter is added to the total for any previous quarters during that fiscal year to come up with a cumulative total volume taken during that fiscal year.

Data Limitations: None known at this time.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Outcome 02-01.01 Percent of Texas population served by public water systems that meet drinking-water standards

Short Definition: This measure will report the percent of the total Texas residential population served by all public water systems (PWSs) that have not had maximum contaminant level (MCL) violations, lead action level violations, or treatment technique violations.

Purpose/Importance: Measures the success of regulatory activities conducted by the TCEQ to protect the public health of Texans receiving water from a public drinking-water system. This measure reflects the percent of the population in Texas served by drinking-water systems that meet drinking-water standards.

Source/Collection of Data: Population information is gathered during each comprehensive compliance investigation (CCI) survey of a public water system (PWS) conducted by field staff. Violation data is obtained from the review of chemical and microbiological sample analysis data that is submitted to the TCEQ from accredited certified laboratories after samples are collected by the PWS personnel or by contract sample collectors. Chemical and microbiological sample analysis data reports are kept in the TCEQ Central Records. Population, sample analysis, and violation data are kept in the Safe Drinking Water Information System (SDWIS).

Method of Calculation: Using the SDWIS, the measures are based on the total Texas population served by PWSs that have not had maximum contaminant level (MCL), lead action level, or treatment technique violations, as described by the Public Drinking Water Standards. This population figure is divided by the total Texas population served by all public water systems and multiplied by 100 to derive a percentage.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 02-01.02 Percent of Texas population served by public water systems protected by a program that prevents connections between potable and non-potable water sources

Short Definition: The percent of the Texas population served by community public water systems protected by a program that prevents backflow from cross-connections to actual or potential contamination hazards.

Purpose/Importance: To indicate what percentage of the population is served by community public water systems that have cross-connection control programs. Having a cross-connection control program protects the public water system from contamination caused by backflow of actual or potential contamination hazards into the system, as required by Texas Health and Safety Code 341.033(f).

Source/Collection of Data: Data is collected from cross-connection control program questionnaires that were mailed to community public water systems in the State of Texas, comprehensive compliance inspections conducted by TCEQ regional staff, and cross-connection control program surveys conducted by TCEQ central office staff.

Method of Calculation: Using information from the TCEQ public water supply databases, the number of Texas residents served by community water systems that have a cross-connection control program will be divided by the total residential population served by community public water systems, and the result multiplied by 100 to get a percentage.

Data Limitations: Data is limited by the information provided by the community public water systems in returned cross-connection control program questionnaires and the reported population of the State of Texas served by community water systems.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-01.01 Number of public drinking-water systems that meet primary drinking-water standards

Short Definition: Number of public drinking-water systems that meet drinking-water standards.

Purpose/Importance: Measures the success of all regulatory activities conducted by the TCEQ to protect the public health of Texans receiving water from a public drinking-water system. This measure will report the total number of all public water systems that have not had maximum contaminant level (MCL), lead action level, or treatment technique violations.

Source/Collection of Data: Public water system information is gathered during each comprehensive compliance investigation (CCI) of a public water system (PWS) conducted by field staff. Violation data is obtained from the review of chemical and microbiological sample analysis data that is submitted to the TCEQ from accredited laboratories after samples are collected by PWS personnel or by contract sample collectors. CCI reports, as well as chemical and microbiological sample analysis data reports, are kept in the TCEQ Central Records. Population, sample analysis, and violation data are kept in the Safe Drinking Water Information System (SDWIS).

Method of Calculation: Using the SDWIS, the measures will report the number of PWSs that have not had maximum contaminant level, lead action level, or treatment technique MCL violations as described by the Public Drinking Water Standards.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-01.02 Number of drinking-water samples collected

Short Definition: Number of drinking-water samples collected.

Purpose/Importance: Chemical samples are collected from public water systems (PWSs) to protect public health by determining if the PWS is providing water that meets public drinking-water standards to its customers. Samples must be collected in order to be analyzed.

Source/Collection of Data: Chemical samples are collected by PWS personnel, contract sample collectors, or TCEQ regional staff. The numbers are reported to the Water Supply Division on a monthly basis. Original data are kept in the Central Records facility located at TCEQ headquarters. It is also maintained electronically in the Safe Drinking Water Information System (SDWIS). Each reporting period, TCEQ regional staff submits the number of samples collected to the Water Supply Division.

Method of Calculation: The number of chemical samples is set by the requirements of the Public Drinking Water Standards, and the anticipated number is maintained in the SDWIS. Chemical samples collected from PWSs are reported from two sources. The number of chemical samples collected by the Water Supply Division contractor is tracked by the Water Supply Division, while samples collected by TCEQ regional staff will be reported by them to the OCE central office staff on a monthly basis. The number of samples reported will be totaled by OCE central office staff and sent to the Water Supply Division on a quarterly basis.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-01.03 Number of district applications processed

Short Definition: Number of district applications processed.

Purpose/Importance: This measure reflects the number of major and minor district applications reviewed.

Source/Collection of Data: Using the agency’s Water Utilities Database (WUD) system, this measure will report on the number of all district applications reviewed that receive either administrative approval, are referred to the Commission for action, or are dismissed or withdrawn.

Method of Calculation: Using the agency’s WUD system, the number of district applications reviewed each quarter are summed and reported to Strategic Planning and Assessment.

Data Limitations: The number of district applications received is related to the economy and development activity in the state.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.01 Percent of inspected or investigated air sites in compliance

Short Definition: Percent of inspected or investigated air sites in compliance.

Purpose/Importance: The measure reflects inspection or investigation activity as regulated entities are inspected or investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates of sites following inspections or investigations allows the agency to determine if regulatory assistance, inspection and investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: This information is tracked using CCEDS. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action).

Method of Calculation: The percent of inspected or investigated air sites in compliance is derived by calculating the total number of sites inspected or investigated for compliance with air rules, regulations, and statutes minus the total number of air cases screened and approved for enforcement action, dividing this difference by the total number of sites inspected or investigated for compliance with air rules, regulations, statutes, multiplied by 100.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of the regulated community regarding their ability to comply.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.02 Percent of inspected or investigated water sites and facilities in compliance

Short Definition: Percent of inspected or investigated water sites and facilities in compliance.

Purpose/Importance: This measure reflects inspection/investigation activity as regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates following inspections/investigations allows the agency to determine if regulatory assistance, inspection/investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: The enforcement and inspection/investigation information is tracked using CCEDS, and the number of wastewater and water supply facilities is tracked using the Water Utilities Database, TRACS, and the Federal Permit Compliance System. The total number of cases screened and approved for enforcement action does not include occupational certification program activities. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action).

Method of Calculation: The percent of inspected or investigated water sites and facilities in compliance is derived by taking the total number of facilities inspected/investigated for compliance with water rules, regulations, and statutes, including water-rights sites, wastewater treatment facilities, public water supply systems, sludge and septage transporters, beneficial use sites, and livestock and poultry operations; plus the number of wastewater and water supply facilities required to self-report and/or conduct chemical analyses; minus the total number of water cases (for the categories described above) screened and approved for enforcement action; and dividing this difference by the total number of facilities inspected/investigated or evaluated for compliance with water rules/regulations/statutes, including self-reporting requirements (as described above); multiplied by 100.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of the regulated community regarding their ability to comply.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.03 Percent of inspected or investigated waste sites in compliance

Short Definition: Percent of inspected or investigated waste sites in compliance.

Purpose/Importance: The measure reflects inspection or investigation activity as regulated entities are inspected or investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates following inspections or investigations allows the agency to determine if regulatory assistance, inspection and investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: This information is tracked using CCEDS. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action).

Method of Calculation: The percent of inspected or investigated waste sites in compliance is derived by calculating the total number of facilities inspected or investigated for compliance with waste rules, regulations,

and statutes minus the total number of cases screened and approved for enforcement action, dividing this difference by the total number of facilities inspected or investigated for compliance with waste rules, regulations, and statutes, multiplied by 100. Waste sites include industrial and hazardous waste, municipal solid waste, petroleum storage tank, underground injection control, and radioactive waste sites.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of the regulated community regarding their ability to comply.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.04 Percent of identified noncompliant sites and facilities for which timely and appropriate enforcement action is taken

Short Definition: Percent of identified noncompliant sites and facilities for which appropriate action is taken.

Purpose/Importance: This measure compares enforcement actions that the agency takes during a fiscal year and determines whether they have been taken within appropriate time frames. Timeliness of enforcement processes is important to ensure that the regulated entity returns to compliance as soon as possible.

Source/Collection of Data: Using CCEDS, the Enforcement Division will determine the total number of formal enforcement actions taken during the reporting period and will evaluate whether or not the actions were completed timely. Formal actions include issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action), as determined according to agency guidelines. Each of these actions taken will be evaluated to determine whether or not the action was completed within internal agency time frames in order to determine whether appropriate action was taken, using the date of screening as the start date and the date of the order, compliance agreement, or referral as the end date.

Method of Calculation: The percentage will be calculated by taking the total number of cases with actions taken within appropriate time frames against noncompliant facilities divided by the total number of cases with formal action taken, multiplied by 100 to derive a percentage.

Data Limitations: Time frames for completion of enforcement actions involve processes that cannot be solely controlled by the TCEQ. The respondents in these cases can create delays in processing the orders and compliance agreements if they request hearings or if the technical requirements are complex, requiring extensive negotiation.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.05 Percent of investigated occupational licensees in compliance

Short Definition: Percent of inspected or investigated licensees in compliance.

Purpose/Importance: The measure reflects inspection and investigation activity as occupational certification licensees are inspected or investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates following investigations allows the agency to determine if regulatory assistance, investigation, and enforcement programs are effective. Lower

compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: This information is tracked using CCEDS. An enforcement action is defined as issuance of an order, compliance agreement, or referral to the OAG.

Method of Calculation: The percent of inspected licensees in compliance is derived by calculating the total number of licensees inspected or investigated by the Field Operations Support Division and the regional offices plus the number of complaints investigated requiring no additional investigation (Total Investigations) minus the total number of occupational certification cases screened and approved for enforcement action, dividing this difference by the number of Total Investigations (as defined above), multiplied by 100.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of licensees regarding their ability to comply.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.06 Percent of administrative orders settled

Short Definition: Percent of Administrative Orders Settled by the Enforcement Division

Purpose/Importance: Reflects agency effectiveness in quick settlement of enforcement matters.

Source/Collection of Data: This information is tracked using CCEDS.

Method of Calculation: Using CCEDS, the percent of administrative orders settled by the Enforcement Division is calculated by determining the total number of administrative orders issued during the fiscal year and the number of those orders that contain a “settlement achieved by Enforcement Coordinator” date in the database. The number of orders settled by the Enforcement Division will then be divided by the total number of orders issued for the fiscal year and multiplied by 100.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.07 Percent of administrative penalties collected

Short Definition: Percent of administrative penalties collected.

Purpose/Importance: This measure reflects the success of administrative penalty collection efforts by the agency.

Source/Collection of Data: This measure will be calculated using databases maintained by the Financial Administration Division.

Method of Calculation: Using databases maintained by the Financial Administration Division, this measure will be reported by dividing the total amount of administrative penalty invoices outstanding at the end of the fiscal year by the total amount of administrative penalties invoiced and due for the fiscal year. This calculation \times 100 will yield the percent of administrative penalties not collected during the fiscal year. Subtracting this calculation from 100 percent provides the percent of administrative penalties collected during the fiscal year.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: N/A.

Output 03-01-01.01 Number of inspections and investigations of air sites

Short Definition: Number of inspections and investigations completed at regulated air sites.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of inspections/investigations completed for air entities during the reporting period. An inspection/investigation is defined as the evaluation of a regulated entity against a standard and includes all (initial and follow up) compliance investigations/inspections, file reviews, site assessments and agent evaluations. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. The number does not include citizen complaint investigations or emissions events investigations.

Method of Calculation: Each reporting period, Central Office staff retrieves from the Consolidated Compliance and Enforcement Data System (CCEDS) the number of investigations completed in the field offices as well as those completed by city and or county local programs for certain air related activities. An investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-01.02 Number of inspections and investigations of water-rights sites

Short Definition: Number of inspections/investigations completed at regulated water-rights sites.

Purpose/Importance: The measure reflects agency efforts to divide the water of the streams and regulate the controlling works of reservoirs in accordance with the adjudicated water rights.

Source/Collection of Data: Using a manual count of records maintained by the Watermaster Program, this measure is the total number of Watermaster diversion site inspection/investigations performed as a result of a request to divert water.

Method of Calculation: Each reporting period, the Water Availability Division retrieves from the database the number completed by the Watermaster staff.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-01.03 Number of inspections and investigations of water sites and facilities

Short Definition: Number of inspections and investigations completed at regulated water sites and facilities.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using data retrieved from the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of inspections or investigations completed for water entities during the reporting period.

An inspection or investigation is defined as the evaluation of a regulated entity against a standard and includes all (initial and follow up) compliance inspections, file reviews, site assessments, and agent evaluations. Water entities include, but are not limited to, wastewater treatment facilities, public water supply systems, sludge applicators or transporters, stormwater facilities (including facilities in the Edwards Aquifer regulated area), aggregate production operations, on-site sewage facilities (OSSFs) (including compliance review audits of OSSF authorized agents), livestock and poultry operations, and municipal utility districts. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred.

This measure includes OSSF installation and follow-up investigations, as well as Edwards Aquifer Protection Program (EAPP) compliance and follow-up investigations. This measure does not include OSSF or EAPP plan review investigations, since those numbers are included in Output Measure 01-02-02.01. Additionally, this number also does not include citizen complaint investigations.

Method of Calculation: Each reporting period, OCE staff retrieves from CCEDS the number of investigations completed in the regional offices for certain activities. An investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 03-01-01.04 Number of inspections and investigations of waste sites

Short Definition: Number of inspections and investigations completed at waste sites.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of inspections/investigations completed at regulated municipal solid waste (MSW), industrial and hazardous waste (IHW), radioactive material recovery or waste disposal, and petroleum storage tank (PST) entities during the reporting period. Investigation is defined as the evaluation of a regulated entity against a standard and includes all (initial and follow up) compliance inspections, file reviews, site assessments and agent evaluations. MSW includes, but is not limited to investigations of generators, storage sites, transporters and processors of waste tire entities and used oil/used oil filter facilities. IHW includes, but is not limited to, investigations of generators, treatment/storage, land disposal, boilers and industrial furnaces (BIF), underground injection control (UIC), Department of Defense/Department of Energy and border warehouses. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. Number does not include citizen complaints investigations.

Method of Calculation: Each reporting period, the OCE retrieves from CCEDS the number of investigations completed in the regional offices as well as those completed by Office of Compliance and Enforcement staff, contracted staff, and city and/or county local programs for certain activities. An investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 03-01-01.01 Average time (days) from air, water, or waste inspection to report completion

Short Definition: Average time to complete an inspection/investigation of air, water, or waste sites.

Purpose/Importance: The measure reflects how efficiently the agency completes investigations of air, water, or waste sites. An inspection or investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in the database. Inspection or investigation is defined as the evaluation of a regulated entity against a standard.

Source/Collection of Data: All inspection and investigation and report-completion data is entered into CCEDS.

Method of Calculation: This measure is derived by calculating the total number of calendar days between the date of an inspection or investigation and the date of completion, divided by the total number of completed inspections or investigations reported during the reporting period. An inspection or investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and management's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 03-01-01.01 Number of citizen complaints investigated

Short Definition: Number of citizen complaints investigated.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of citizen complaints investigated.

Method of Calculation: Each reporting period, the central office retrieves from CCEDS the number of complaints investigated by the agency as well as those investigated by city or county local programs for certain activities. A complaint is considered investigated when the investigation has been conducted, a report has been written, management has approved, and management's approval date has been reflected in the database.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-01.02 Number of emission events investigations

Short Definition: Number of emissions events investigations.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. An emissions event is any upset event or unscheduled maintenance, startup, or shutdown activity, from a common cause, that results in unauthorized emissions of air contaminants from one or more emissions points at a regulated entity. Potential violations are identified through investigations of reports and records of these emissions. Investigations may include either: an onsite investigation conducted immediately following a major emissions event; a scheduled onsite investigation covering emissions events at the site from the most recent 12-month period; and an in-house investigation of an emissions event.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Database System (CCEDS), this measure is calculated by adding the total number of emissions events investigations. An inspection/investigation is defined as the evaluation of a regulated entity against a standard.

Method of Calculation: During each reporting period, the Central Office retrieves from CCEDS the number emissions events investigations conducted.

Data Limitations: The TCEQ has no control over the number of emissions events that occur.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 03-01-01.03 Number of spill cleanup inspections or investigations

Short Definition: Number of spill cleanup inspections or investigations.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of initial, on-site spill incident inspections or investigations conducted. An inspection or investigation is defined as the evaluation of a regulated entity against a standard. Inspections or investigations are conducted to ensure compliance of regulated entities with rules, regulations, and statutes designed to protect human health and the environment.

Method of Calculation: During each reporting period, the central office retrieves from CCEDS the number of initial, on-site spill investigations conducted.

Data Limitations: The TCEQ has no control over the number of spills that occur.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Below projections.

Output 03-01-02.01 Number of environmental laboratories accredited

Short Definition: Number of environmental laboratories accredited according to Texas Water Code 5.801, et seq.

Purpose/Importance: The measure reflects the number of environmental laboratories accredited according to standards adopted by the National Environmental Laboratory Accreditation Conference.

Source/Collection of Data: Each accreditation is documented by a certificate prepared by the Monitoring Division.

Method of Calculation: Accreditation information is compiled from primary records maintained by division staff.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-02.02 Number of small businesses and local governments assisted

Short Definition: The number of small businesses and local governments assisted includes the following types of direct assistance: answers to hotline inquiries regarding permit and regulatory applicability; site assistance visits; notification of rule changes; outreach activities; industry specific workshops; and government sponsored conferences.

Purpose/Importance: This measure provides an indication of the responsiveness of Small Business and Local Government Assistance (SBLGA) staff to small business and local government inquiries. This measure also indicates pro-active activities provided by SBLGA staff to assist small businesses and local governments.

Source/Collection of Data: The data is collected using an electronic tracking and reporting system maintained by SBLGA staff.

Method of Calculation: A total number is obtained by adding the types of assistance provided to small businesses and local governments as indicated in the above definition.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 03-01-02.01 Average number of days to file the initial settlement offer

Short Definition: Average number of days to file the initial settlement offer through either mailing a proposed order or filing an Executive Director's Preliminary Report and Petition (EDPRP).

Purpose/Importance: Reflects agency efficiency in filing notices notifying violators of the violations alleged and penalties sought.

Source/Collection of Data: This information is tracked using CCEDS.

Method of Calculation: Using CCEDS, the average number of days to file an initial settlement offer will be calculated as the sum of the number of days from assignment of the Enforcement Action Referral to the mailing date of the initial proposed order or the filing date of the initial EDPRP on a case, divided by the total number of initial draft orders and EDPRPs. EDPRPs for failed expedited orders will not be counted since the initial proposed orders will already have been counted in this category.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 03-01-02.01 Amount of administrative penalties paid in final orders issued

Short Definition: Amount of administrative penalties required to be paid in final administrative orders issued.

Purpose/Importance: Reflects penalties required to be paid. *Note:* This is not the amount that is paid to the TCEQ, but rather the amount that the administrative orders require to be paid; some may have payment schedules and some may be default orders.

Source/Collection of Data: Using CCEDS, this measure will be reported at the end of the fiscal year by calculating the total penalty amounts required to be paid in final administrative orders issued.

Method of Calculation: This measure will be derived by calculating the total penalty amounts required to be paid in final administrative orders issued.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: N/A.

Explanatory 03-01-02.02 Amount required to be paid for supplemental environmental projects issued in administrative orders

Short Definition: Amount required to be paid for supplemental environmental projects (SEPs) issued in administrative orders.

Purpose/Importance: Reflects money required to be paid or projects required to be conducted in addition to penalty amounts paid in enforcement orders. The SEPs are normally designed to benefit the communities or the environment where the violations occurred.

Source/Collection of Data: Using CCEDS, this measure will be reported at the end of the fiscal year for the total dollar amount specified in the administrative orders that must be spent on SEPs approved by the agency.

Method of Calculation: This measure will be derived by calculating the total dollar amount specified in the administrative orders that must be spent on supplemental environmental projects approved by the agency.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: N/A.

Explanatory 03-01-02.03 Number of administrative enforcement orders issued

Short Definition: Number of administrative enforcement orders issued

Purpose/Importance: Reflects agency enforcement efforts.

Source/Collection of Data: Using CCEDS, this measure will be reported at the end of the fiscal year for the number of administrative orders issued.

Method of Calculation: This measure will be derived by calculating the number of administrative orders issued during the fiscal year.

Data Limitations: The agency has very limited control over the number of administrative enforcement orders that are issued in a given year. This number is determined by the number of violations committed by the regulated community. In addition, finalization of enforcement orders cannot be solely controlled by the TCEQ. Due process of law allows all respondents for enforcement orders the opportunity for hearing. The timing for the

hearing is then the decision of the administrative law judge at the State Office of Administrative Hearings. In addition, delays can occur when the technical requirements necessary to achieve compliance are complex, requiring extensive negotiations.

Calculation Type: Cumulative

New Measure: No.

Desired Performance: Below projections.

Output 03-01-03.01 Number of presentations, booths, and workshops conducted on pollution prevention/waste minimization and voluntary program participation

Short Definition: Total number of pollution prevention/waste minimization and voluntary program workshops, booths, and presentations conducted by Small Business and Environmental Assistance and Take Care of Texas staff for promotion of pollution prevention/waste minimization and voluntary program participation.

Purpose/Importance: This measure provides an indication of Small Business and Environmental Assistance and Take Care of Texas staff's ability to conduct outreach and information dissemination of pollution prevention and voluntary program information to Texas businesses and organizations.

Source/Collection of Data: Workshops, booths, and presentations are tracked by Small Business and Environmental Assistance staff, who include workshop, booth, and presentation information in the section's events database. This information is then pulled from the database and compiled in a spreadsheet.

Method of Calculation: The number of workshops, booths, and presentations conducted during each quarter are summed. Fiscal year totals are calculated by adding quarterly totals.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-03.02 Number of quarts of used oil diverted from improper disposal

Short Definition: Number of quarts of used oil collected for processing instead of potential disposal in a landfill or release to land or water

Purpose/Importance: This number indicates the amount of used oil that, if not collected by the registered collection centers, could otherwise be delivered to landfills or improperly disposed of, potentially causing harm to human health and the environment. The number is a quantitative measurement of pollution prevention. This number represents the total volume of used oil, expressed in quarts, that was reported to the agency by used oil collection centers. The collection centers collect and prepare the oil for recycling before reuse or resale to the public.

Source/Collection of Data: Using an automated agency system maintained by the Permitting and Registration Support Division, this measure tracks the quantities of used oil reported annually by used oil collection centers. The report is due on January 25 of each year and reflects activities for the previous year. No information is received during the first quarter and the totals are collected from forms received during the second quarter and late filings during the third quarter.

Method of Calculation: Performance data are obtained from querying automated agency systems for the number of quarts of used oil collected for processing.

Data Limitations: The TCEQ has no control over the number of quarts of used oil received by collection centers. Therefore, the number may fluctuate and there may be a wide range in this measure from year to year. TCEQ staff continues to work with the collection centers to ensure that reported values are accurate and representative of actual oil collected.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-03.01 Tons of hazardous waste reduced as a result of pollution prevention planning

Short Definition: This measure indicates the level of hazardous waste reduction by Texas facilities and provides information regarding the agency's efforts to reduce toxics released in Texas.

Purpose/Importance: This information is not measured by any other program at the TCEQ and provides information that is independent of economic factors such as production.

Source/Collection of Data: The source of the data is the information provided by facilities on the annual progress report required by Waste Reduction Policy Act (WRPA). This information is maintained in an Oracle database.

Method of Calculation: The measure is calculated by adding up the source reduction number from all facilities reporting.

Data Limitations: Data is dependent on accurate and timely reporting by facilities. In addition, the data reported reflects actual values from the prior year. For example, data reported in September 2000 will represent data received from industry in July 2000, which is for their calendar year 1999.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-03.02 Tons of waste collected by local and regional household hazardous waste collection programs

Short Definition: The tons of waste collected through household hazardous waste collection programs, reported annually by the programs to the TCEQ.

Purpose/Importance: This measure provides data on how much household hazardous waste and other waste was collected and properly disposed of in Texas through household hazardous waste collection programs, thus reducing the impact on the environment.

Source/Collection of Data: Reports from collection programs. This data reports results of collection programs as submitted by entities with programs. Staff maintains the data in a spreadsheet database.

Method of Calculation: Summation of all reports submitted for related programs in Texas.

Data Limitations: Data quality is limited to quality of reports submitted to the agency.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-03.03 Number of registered waste tire facilities and transporters

Short Definition: Number of Registered Waste Tire Facilities and Transporters.

Purpose/Importance: The number depicts the quantity of regulated facilities involved in scrap tire management, who have complied with the agency’s rules and provide reports on tire management and recycling. The number can also indicate any trends in scrap tire management, such as increase or decrease in number of facilities from year to year.

Source/Collection of Data: The number is obtained from either the Tires Management System (TMS) or an alternate database file from TMS. This number represents the universe of facilities that either transport, store, process, recycle or burn for energy recovery, scrap tires.

Method of Calculation: The OCE registers and maintains data on these facilities. The number is a sum total of all entries in the database.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.01 Percent of leaking petroleum storage tank sites cleaned up

Short Definition: The percentage of leaking petroleum storage tank sites at which no further corrective action is required, compared to the total population of known leaking petroleum storage tank sites.

Purpose/Importance: This measure provides an indication of the agency’s efforts to clean up leaking petroleum storage tank sites relative to the total population of known leaking petroleum storage tank sites.

Source/Collection of Data: This measure uses an agency database maintained by the Remediation Division.

Method of Calculation: Using an agency database maintained by the Remediation Division, the number of leaking petroleum storage tank sites issued “no further action” letters is divided by the total number of reported leaking petroleum storage tank sites, multiplied by 100 to derive a percentage.

Data Limitations: Most “no further action” letters are issued upon a written request from responsible parties and the agency has limited control when these requests are submitted. Therefore, the percentage reported may represent fewer sites than would otherwise actually qualify for “no further action” status.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.02 Total number of Superfund remedial actions completed

Short Definition: The number of state and federal Superfund sites with completed remedial actions since program inception.

Purpose/Importance: This measure reflects long-term agency efforts to clean up Superfund sites.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division the total number of state and federal Superfund sites since program inception attaining completion of the remedial action is calculated.

Method of Calculation: The total combined number of state and federal Superfund sites with completed remedial actions since program inception. The remedial action is considered complete when a site is deleted from

the State Registry or the National Priorities List, upon the completion of construction, or upon documentation that no further action is needed.

Data Limitations: The agency has limited control over the federal Superfund program listings, progression of federal site cleanups and deletions. The progression of sites through the federal Superfund program is directly related to federal funding issues, scheduling, and the final approval of submittals, which are reviewed by the EPA, Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also affect the progress of Superfund sites that are federal facilities.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.03 Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse

Short Definition: The percentage of voluntary and brownfield properties/sites returned to a productive use within a community.

Purpose/Importance: This percentage provides a measure of the overall efficiency of the VCP to meet the goals of applicants in receiving certificates of completion. The percentage derived is indicative of the trend of the willingness of site owners/operators and prospective purchasers to voluntarily address their contaminated sites through the VCP and the adequacy of the VCP in meeting the review deadlines necessary for completing property transactions.

Source/Collection of Data: From information collected in a database, adding the total number of certificates of completion issued since the inception of the program and the total number of VCP applications submitted by site owners/operators and prospective purchasers and accepted since the inception of the program.

Method of Calculation: The percentage is obtained by dividing the total number of VCP certificates of completion issued since the inception of the program by the total number of VCP applications accepted since the inception of the program, multiplied by 100.

Data Limitations: The TCEQ has no control over the number of site owners/operators and prospective purchasers who voluntarily enter the VCP since their choice controls the number of sites that enter the VCP and the completion of the tasks necessary for issuance of a certificate of completion.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.04 Percent of industrial solid and municipal hazardous waste facilities cleaned up

Short Definition: Percent of industrial solid and municipal hazardous waste facilities cleaned up.

Purpose/Importance: This measure tracks the achievement of final cleanup goals at industrial solid waste and municipal hazardous waste facilities. It evaluates the reduction of the number of contaminated facilities across the state, and is a measure of the protection of human health and the environment.

Source/Collection of Data: The data source is correspondence sent out from the Industrial and Hazardous Waste Corrective Action Program. Correspondence and the facility status are logged in a database maintained by the Remediation Division.

Method of Calculation: The number of facilities with no further action in the Industrial and Hazardous Waste Corrective Action Program is divided by the total number of reported facilities in the program, and then multiplied by 100. The percentage is reported annually, at the end of the fiscal year.

Data Limitations: This measure involves review and approval of documents required by agency orders, permits, and compliance plans, as well as self-implemented cleanup allowed by the regulations. The agency does not have control over the number of cleanup projects, the number of documents submitted, or the types or quality of documentation submitted to pursue self-implemented cleanups.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-01.01 Number of petroleum storage tank self-certifications processed

Short Definition: Number of petroleum storage self-certifications processed.

Purpose/Importance: The measure reflects agency workload in processing PST self-certifications.

Source/Collection of Data: Using an automated agency data system maintained by the Permitting and Registration Support Division, this measure will track the number of owner/operator self-certifications processed in Texas each year.

Method of Calculation: The automated agency systems will be queried for the number of self-certifications processed.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-01.02 Number of emergency response actions at petroleum storage tank sites

Short Definition: The number of leaking petroleum storage tank sites to which a state lead contractor is dispatched to address an immediate threat to human health or safety (e.g., an explosion or fire hazard, vapor impacts to buildings, or surface water impacts).

Purpose/Importance: This measure provides an indication of the number of leaking petroleum storage tank sites that have an emergency situation requiring action by the agency to protect human health or safety.

Source/Collection of Data: Using an agency database maintained by the Remediation Division, the number of leaking petroleum storage tank sites to which a state lead contractor is dispatched to address an emergency situation is tracked.

Method of Calculation: At the end of each quarter, the database is used to arrive at a total number of sites to which a state lead contractor was dispatched to address an emergency situation during that quarter. The total for each quarter is added to the total for any previous quarters during that fiscal year, to come up with a cumulative total of sites addressed during that fiscal year.

Data Limitations: Most response actions to leaking petroleum storage tank emergency situations are performed on a demand basis. Therefore, the number of sites that will require emergency response actions is unpredictable.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Output 04-01-01.03 Number of petroleum storage tank cleanups completed

Short Definition: The number of leaking petroleum storage tank sites at which no further corrective action is required.

Purpose/Importance: This measure provides an indication of the agency’s efforts to clean up leaking petroleum storage tank sites during the reporting period.

Source/Collection of Data: This measure uses an agency database maintained by the Remediation Division.

Method of Calculation: Using an agency database maintained by the Remediation Division, the number of leaking petroleum storage tank sites issued “no further action” letters during the reporting period is calculated.

Data Limitations: Most “no further action” letters are issued upon a written request from responsible parties and the agency has limited control when these requests are submitted. Therefore, since the number of these letters issued during a reporting period is primarily determined by the number submitted by the responsible parties, the reported number may represent fewer sites than would otherwise actually qualify for “no further action” status.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 04-01-01.01 Average time (days) to authorize a state lead contractor to perform corrective action activities

Short Definition: Average number of days for the agency to authorize, through a work order, a state lead contractor to perform corrective action activities at LPST sites.

Purpose/Importance: This measure provides an indication of the agency’s efforts to clean up state lead LPST sites.

Source/Collection of Data: This measure uses an agency database maintained by the Remediation Division.

Method of Calculation: Using an agency database maintained by the Remediation Division, the number of state lead work-order proposals received is tracked, the number of days to review and respond to each proposal through issuance of a work order is recorded, and the average response time is calculated for the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Below projections.

Output 04-01-02.01 Number of immediate response actions completed to protect human health and the environment

Short Definition: The number of immediate response actions completed to protect human health and the environment.

Purpose/Importance: This measure reflects the number of immediate response actions completed by the Remediation Division in an effort to protect human health and the environment and prevent sites from progressing into the Superfund program.

Source/Collection of Data: Using an agency database maintained by the Remediation Division, this measure will report the total number of incidents where immediate response actions were completed to protect human health and the environment.

Method of Calculation: At the end of a reporting quarter, a program database query will report the number of immediate response actions completed for that quarter. The immediate response action may be completed at the conclusion of field work (e.g., soil excavation); when the site is proposed to the State Registry or National Priorities List (e.g., for private water-well filtration system operation); or when the state participates in cost sharing of a complete response action by a federal agency. Additionally, the fiscal-year cumulative total will be reported each quarter in the year-to-date performance.

Data Limitations: Potential factors affecting this measure may be property access, lack of sites requiring response actions, budgetary or funding constraints, a determination that an incident is not time critical, the magnitude of required response activities, and community involvement.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Output 04-01-02.02 Number of Superfund site assessments

Short Definition: The number of potential Superfund sites that have undergone an eligibility assessment for either the state or federal Superfund program.

Purpose/Importance: This measure provides an indication of the Remediation Division efforts to prioritize and assess sites under Superfund program eligibility criteria during the reporting period.

Source/Collection of Data: Using an agency database maintained by the Remediation Division, the number of Superfund program eligibility assessments completed are tracked by completion date.

Method of Calculation: At the end of each quarter, a database query is conducted to arrive at a total number of Superfund program eligibility assessments completed during that quarter. The total for each quarter is added to the total for any previous quarters during that fiscal year to determine a cumulative total of eligibility assessments completed during that fiscal year.

Data Limitations: Eligibility assessments are conducted on sites referred to the Site Discovery and Assessment Program by various entities (consisting of but not limited to the U.S. Environmental Protection Agency, TCEQ Enforcement and Field Operations Emergency Response Programs, the State Attorney General's Office, and bankruptcy courts). The number of eligibility assessments that are completed each fiscal year is dependent on the number and complexity of referrals received by the program. Time critical factors may require the diversion of staff resources to immediate response actions rather than assessment activities.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.03 Number of voluntary and brownfield cleanups completed

Short Definition: The number of voluntary cleanup and brownfields sites that have completed necessary response actions through either the removal or control of contamination to levels that are protective of human health and the environment.

Purpose/Importance: Upon completion of response action(s), a certificate of completion is given to the applicant which states that all nonresponsible parties are released from all liability to the state for any past contamination. This liability protection provides significant incentives for both site owners/operators and

prospective purchasers to voluntarily bring contaminated sites into the Voluntary Cleanup Program (VCP) and complete necessary cleanups.

Source/Collection of Data: Site owners/operators or prospective purchasers voluntarily submit an application and an agreement to the VCP for program eligibility evaluation. The applicant's goals for site cleanup, including their schedule for conducting necessary site investigation and cleanup are reviewed by VCP staff. Upon completion of site cleanup, VCP staff approve a final report based on the applicant's meeting all of the necessary regulatory standards for the site. Once it has been determined that the site is protective of human health and the environment, a certificate of completion is issued to the applicant. The number of certificates of completion issued each quarter is reported in this performance measure.

Method of Calculation: The Voluntary Cleanup Program database is queried for the quarterly and cumulative totals of completion certifications issued for the fiscal year.

Data Limitations: The TCEQ has no control over the number of site owners/operators and prospective purchasers who voluntarily enter the VCP since their choice controls the number of sites that enter the VCP and the completion of the tasks necessary for issuance of a certificate of completion.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Above projections.

Output 04-01-02.04 Number of Superfund sites in Texas undergoing evaluation and cleanup

Short Definition: The combined number of Superfund sites in Texas that are undergoing evaluation and cleanup activities in the state and federal Superfund process.

Purpose/Importance: Reflects the combined number of state and federal Superfund sites in Texas that are undergoing remedial investigation, feasibility study, remedial design, or remedial action activities and progressing toward completion of the remedial action and delisting from the Texas Registry and the National Priorities List.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division, data will be collected to reflect the combined number of state and federal Superfund sites in Texas that are undergoing evaluation and cleanup.

Method of Calculation: Database query.

Data Limitations: The agency has limited control over the federal Superfund program listings or the progression of federal site cleanups and deletions. The progression of sites through the federal Superfund program is directly related to federal funding issues, scheduling, and the final approval of submittals, which are reviewed by the EPA. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also affect the progress of Superfund sites that are federal facilities. Additionally, the agency cannot accurately predict how many federal sites will be discovered and added to the program during any given year. Since Superfund sites are abandoned or inactive sites, each site is unique and has inherent unknowns (e.g., the nature and extent of the contamination problems) to be investigated before a remedy can be formulated.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.05 Number of Superfund remedial actions completed

Short Definition: The combined number of state and federal Superfund sites that completed remedial actions during a reporting period.

Purpose/Importance: Reflects the combined number of state and federal Superfund sites in a reporting period no longer posing an unacceptable risk to human health or the environment due to the completion of remedial actions.

Source/Collection of Data: A program database maintained by the Remediation Division calculates the combined number of state and federal Superfund sites attaining remedial action completion status in a reporting period.

Method of Calculation: A program database query will report the number of state and federal Superfund sites that completed remedial actions for that quarter. The fiscal year cumulative total will be reported each quarter in the year-to-date performance. The remedial action is considered complete when a site is deleted from the State Registry or National Priorities List, upon the completion of construction, or upon documentation that no further action is needed. Completion of remedial action does not include post-completion care of the remedy, such as maintenance of treatment systems and on-site waste containment, long-term groundwater monitoring, or maintenance of site security.

Data Limitations: The agency has limited control over the federal Superfund program listings or the progression of federal site cleanups and deletions. The progression of sites through the federal Superfund program is directly related to federal funding issues, scheduling, and the final approval of submittals, which are reviewed by the EPA. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also affect the progress of Superfund sites that are federal facilities. Since Superfund sites are abandoned or inactive sites, each site is unique and has inherent unknowns that may delay attainment of the projected remedial action completion date.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.06 Number of Dry Cleaner Remediation Program (DCRP) site assessments Initiated

Short Definition: The number of Dry Cleaner Remediation Program site assessments initiated. Site assessments are considered initiated upon the issuance of the first work order on the site.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up known dry-cleaning facilities contaminated by dry-cleaner solvents.

Source/Collection of Data: The Dry Cleaner Remediation Program database, maintained by the Remediation Division, will contain DCRP site data, including site assessment data.

Method of Calculation: The total number of site assessments initiated by the Dry Cleaner Remediation Program will be determined from the program's database. Quarterly and year-to-date totals will be generated for specific time periods as required by reporting schedules.

Data Limitations: The TCEQ has no control over the number of eligible dry-cleaner sites applying to the Dry Cleaner Remediation Program, since their choice controls the number of sites that enter the DCRP and the completion of tasks necessary to initiate site assessments.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.07 Number of Dry Cleaner Remediation Program (DCRP) site cleanups completed

Short Definition: The number of Dry Cleaner Remediation Program (DCRP) sites that have had necessary response actions completed through either the removal or control of contamination to levels that are protective of human health and the environment.

Purpose/Importance: This measure reflects the agency’s efforts to clean up known eligible dry-cleaning sites contaminated by dry-cleaner solvents.

Source/Collection of Data: The Dry Cleaner Remediation Program database, maintained by the Remediation Division, contains all program applicants and associated dry-cleaner facility data.

Method of Calculation: The DCRP database is queried for the quarterly and yearly totals of DCRP sites that have been issued “no further action” letters.

Data Limitations: The TCEQ has no control over the number of DCRP applications received. Dry-cleaner sites may or may not be deemed eligible for DCRP assessment and cleanup activities. The DCRP is required to investigate the nature and extent of the contamination for each site. Therefore, assessment and cleanup may vary depending on unique site conditions. In addition, the TCEQ is required to give consideration to sites that pose a higher relative risk to human health and the environment.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 04-01-02.01 Average time (days) to process Dry Cleaner Remediation Program applications

Short Definition: Texas Health and Safety Code, Chapter 374, mandates that the agency’s review and ranking of applications to the Dry Cleaner Remediation Program is not to exceed 90 days.

Purpose/Importance: This measure provides the average number of days for the agency to process Dry Cleaner Remediation Program applications.

Source/Collection of Data: This measure is calculated using the Dry Cleaner Remediation Program database maintained by the Remediation Division.

Method of Calculation: Using the Dry Cleaner Remediation Program database, the number of program applications received is tracked, the number of days to review and rank each application is recorded, and the average review and ranking time is calculated for the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 04-01-02.01 Number of potential Superfund sites to be assessed

Short Definition: The number of potential Superfund sites that have not undergone an eligibility assessment for either the state or federal Superfund program.

Purpose/Importance: At fiscal year’s end, this measure provides an indication of the number of known sites that are to be prioritized and assessed for Superfund eligibility in the subsequent fiscal year(s).

Source/Collection of Data: A program database query is conducted by the Remediation Division to determine the total number of known sites that have not undergone an eligibility assessment under Superfund program eligibility criteria.

Method of Calculation: At the end of each fiscal year, a program database is queried to determine the total number of site assessments that were completed during the fiscal year. This number is subtracted from the total number of known sites in the program database at the end of the fiscal year to determine the number of sites that have not undergone an eligibility assessment for either the state or federal Superfund program.

Data Limitations: Eligibility assessments are conducted on sites referred to the Remediation Division by various entities (consisting of but not limited to the U.S. Environmental Protection Agency, TCEQ Enforcement and Field Operations Emergency Response Programs, and the State Attorney General’s Office, and bankruptcy courts). The number of eligibility assessments that are to be conducted each fiscal year is dependent on the number of referrals received by the program.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 04-01-02.02 Number of state and federal Superfund sites

Short Definition: Number of state and federal Superfund sites.

Purpose/Importance: Reflects the number of state and federal Superfund sites.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division of the Office of Compliance and Enforcement, the number of federal Superfund sites for which minimum hazard ranking scores have been determined and have been proposed for the National Priorities List (NPL) since program inception and the number of state Superfund sites for which minimum hazard ranking scores have been determined and have been proposed for the State Registry since program inception.

Method of Calculation: Database query.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 04-01-02.03 Number of state and federal Superfund sites in post-closure care (O&M) phase

Short Definition: The combined number of Superfund sites in Texas that require state funding for continued operation and maintenance (O&M) activities.

Purpose/Importance: Reflects the combined number of state and federal Superfund sites in Texas that have completed the remedial action process and now require continued state funding to ensure that the remedy remains effective during post-completion care. Activities may include maintenance of treatment systems and on-site waste containment, long-term groundwater monitoring, and maintenance of institutional controls or site security.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division, data will be collected to reflect the combined number of state and federal Superfund sites that are in a post-closure phase.

Method of Calculation: Database query.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 04-01-02.04 Number of Dry Cleaner Remediation Program (DCRP) eligible sites

Short Definition: The number of Dry Cleaner Remediation Program sites that have been ranked, prioritized, and evaluated for corrective action.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up known dry-cleaning facilities contaminated by dry-cleaner solvents.

Source/Collection of Data: The Dry Cleaner Remediation Program database, maintained by the Remediation Division, will contain DCRP site data.

Method of Calculation: The total number of eligible Dry Cleaner Remediation Program sites prioritized and added to the DCRP database. Quarterly and year-to-date totals will be generated for specific time periods as required by reporting schedules.

Data Limitations: The TCEQ has no control over the number of eligible dry-cleaner sites applying to the Dry Cleaner Remediation Program, since their choice controls the number of sites that enter the DCRP.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.01 The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact

Short Definition: The interstate Canadian River Commission will complete an annual accounting of water stored in each state to determine compact compliance. The accounting of water stored in Texas' reservoirs will be used to determine the percent entitlement of water that Texas receives. Due to recent drought conditions, Texas currently stores approximately 100,000 acre-feet annually. The accounting will be completed during the third quarter of the following fiscal year, and will be for the previous calendar year.

Purpose/Importance: The measure is intended to show the extent to which Texas is receiving its share of waters as apportioned by the compact, and serves as an indicator of New Mexico's compliance with the terms of the compact. Continued performance of less than target could indicate that New Mexico has not met its delivery obligation for that year and Texas did not receive its equitable share. Performance of less than target could result in Texas initiating legal proceedings or action, and can serve as an indicator of increased resource needs to rectify any under-delivery. Occasional intermittent performance of less than target could be the result of lower-than-normal precipitation conditions. Precipitation conditions will need to be monitored to determine if a compact violation has occurred.

Source/Collection of Data: Annual reports of water storage as presented to the Canadian River Commission at its annual meeting.

Method of Calculation: This measure is calculated by dividing the actual amount of water stored in Texas' reservoirs (primarily Lake Meredith and Palo Duro Reservoir) by 100,000 acre-feet and converting to a percentage. The 100,000 acre-feet is the average amount of water Texas has in storage during recent years and with New Mexico complying with the compact.

Data Limitations: The accounting is for the previous calendar year, therefore information reported in a given year indicates actual performance for the prior calendar year.

Calculation Type: Non-cumulative.

New Measure: Yes. Due to changes in acre-feet drought projections.

Desired Performance: Above projections.

Outcome 05-01.02 The percentage received of Texas' equitable share of quality water annually as apportioned by the Pecos River Compact

Short Definition: Using the water accounting report of the Pecos River Master and approved by the U.S. Supreme Court, water delivered to Texas will be computed. The water received, including any current credits of past over-deliveries of water, will be divided by the actual amount of water New Mexico is required to deliver under the terms of the compact, as determined by the water accounting report. The accounting of water delivered to Texas is computed during the fourth quarter and will be for the previous calendar.

Purpose/Importance: Measure is intended to show the extent to which Texas is receiving its share of waters as apportioned by the compact, and serves as an indicator of New Mexico's compliance with compact terms. Performance of less than 100 percent in any given year indicates that New Mexico has not met its delivery obligation for that year and that Texas did not receive its equitable share. Performance of less than 100 percent could result in Texas initiating legal proceedings/action, and can also serve as an indicator of increased resource needs to rectify under-delivery.

Source/Collection of Data: Annual water accounting report prepared by the Pecos River Master and approved by the U.S. Supreme Court.

Method of Calculation: Measure is calculated by dividing the actual amount of water received by Texas, including any current credits of past over-deliveries of water (as determined by the annual accounting), by the amount of water New Mexico was required to deliver (as determined by the annual accounting) and converting to a percentage.

Data Limitations: Accounting of water is conducted by the River Master and Supreme Court during the fourth quarter. The accounting is for the previous calendar year; therefore, information reported in a given year indicates actual performance for the prior year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.03 The percentage received of Texas' equitable share of quality water annually as apportioned by the Red River Compact

Short Definition: Using the reports of the engineering and legal committees of the interstate commission, water shortages to Texas' users will be evaluated. If no shortages exist, Texas has received 100 percent of its equitable share. As used in this measure, "equitable share" is defined as lack of water shortages.

Purpose/Importance: Measure is intended to show whether Texas' users of the Red River have experienced any water shortages. Because the quantity of water of the Red River is plentiful and is usually not an issue, a formal accounting of water deliveries to each state has not yet been initiated by the commission. Due to these factors, at this time it is more meaningful to assess whether needs of Texas' users of the Red River are being met, rather than whether each state is meeting its delivery obligation (as in the measures for the Pecos and Rio Grande). Performance of less than 100 percent in any given year indicates that shortages have been experienced and will serve as an indicator that rules for more reaches must be developed and more formal accounting procedures must be implemented.

Source/Collection of Data: Reports prepared by the engineering and legal committees of the interstate commission.

Method of Calculation: Measure is calculated by determining if there have been any water shortages to Texas’ users. Engineer advisors from each state meet annually to discuss water use related to the compact and to identify any shortages.

Data Limitations: The Red River Compact Commission has not initiated formal accounting of water deliveries to each state, therefore “water shortages” is used as a proxy for determining whether Texas has received its equitable share of waters under the terms of the compact. To date, there have been no water shortages and performance has been 100 percent. If shortages occur, and once the commission approves rules for the basinwide accounting, a formal water accounting will commence. Reports used in calculating this measure will be completed after the commission’s annual meeting, usually in the third quarter. Reporting will be on an annual basis for the previous calendar year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.04 The percentage received of Texas’ equitable share of quality water annually as apportioned by the Rio Grande Compact

Short Definition: Using the water accounting report prepared by the engineer advisors and approved by the Commission, water delivered to Texas will be computed. The water delivered, including any current credits or debits of past over/under-deliveries allowable under the compact, will be divided by the actual amount of water Colorado and New Mexico are required to deliver under the terms of the compact, as determined by the water accounting report. The accounting of water delivered to Texas is computed during the third quarter and will be for the previous calendar year.

Purpose/Importance: Measure is intended to show the extent to which Texas is receiving its share of waters as apportioned by the compact, and serves as an indicator of Colorado’s and New Mexico’s compliance with compact terms. Performance of less than target in any given year may indicate that the compact signatories have not met their delivery obligation for that year and that Texas did not receive its equitable share. Performance of less than target could result in Texas initiating legal proceedings/action, and can also serve as an indicator of increased resource needs to rectify underdelivery.

Source/Collection of Data: Annual water accounting report prepared by the engineer advisors and approved by the Commission.

Method of Calculation: Measure is calculated by dividing the actual amount of water received by Texas, including any current credits or debits of past over/under-deliveries allowable under the compact (as determined by the annual accounting), by the amount of water the signatory states were required to deliver (as determined by the annual accounting), and converting to a percentage.

Data Limitations: Accounting of water is conducted at the annual meeting (3rd quarter) of the Commission. The accounting is for the previous calendar year, therefore information reported in a given year indicates actual performance for the prior year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.05 The percentage received of Texas' equitable share of quality water annually as apportioned by the Sabine River Compact

Short Definition: Using the water accounting of water diversions published in the annual report of the Sabine River Compact Administration, the acre-feet of water diverted by Texas will be compared to the historical average for the last five years.

Purpose/Importance: Measure shows whether Texas is receiving its equitable share of quality water from the Sabine River. As used in this measure “equitable share” means that Texas water use, did not exceed the maximum allowed under the compact (i.e., that sufficient water was available to meet the water needs of Texas users). Water quantity on the Sabine is plentiful. Texas and Louisiana may each use 50 percent of the waters, however, to date neither state uses the full amount to which it is entitled. This measure can also serve to indicate whether diversions are increasing over prior years (indicated when percentage reported exceeds 100 percent), and indirectly, whether the amount of excess water available is diminishing. A sustained increase in water diversions may indicate the need for formal accounting procedures.

Source/Collection of Data: Annual report of the Sabine River Compact Administration.

Method of Calculation: Measure is calculated by dividing the actual amount of water diversion by the historical average of diversions for the last five years.

Data Limitations: The Sabine River Compact Commission has not initiated formal accounting of water deliveries to each state. As a result, amount of water diverted is one of the few indicators (or proxies) available for use in calculating “Percent received of Texas' equitable share.” The commission does not control water usage (diversions). Reporting will be on an annual basis for the previous calendar year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

TCEQ Workforce Plan, Fiscal Years 2015–2019

This document is also provided separately to the State Auditor's Office.

Key Factors Facing the Agency

During the next five years, the TCEQ expects challenges as it fulfills its mission and goals. Key economic and environmental factors affecting the agency's workforce include turnover; retention of qualified, experienced employees; and an aging workforce. Economic conditions and high unemployment have previously kept the TCEQ's turnover rate relatively low. Typically, during these climates, working for governmental agencies is seen as more attractive and applicant pools increase. However, with a recovering economy and the largest increase in jobs in the nation, job growth in Texas is projected to outpace the growth in the Texas labor force. This will result in a continuing decline in unemployment over the next two years. Since fiscal 2011, turnover at the TCEQ has increased slightly, by 1.5 percent, as it appears that the economy is slowly recovering.

The ability to compete for highly skilled applicants, particularly in hard-to-fill occupations, will continue to prove critical in our efforts to maintain a diverse and qualified workforce necessary for the agency to carry out its mission. The attractive benefits and retirement package afforded state employees was altered during the recent legislative session, in an effort to address funding shortfalls. It appears likely that these changes will affect our ability to recruit applicants and retain staff.

The TCEQ does not expect significant changes in its mission, strategies, or goals over the next five years, but it does recognize the need to adapt readily to any changes required by legislation. Any new state and federal requirements will be demanding in light of budget and FTE reductions and will likely point to a need to rely more heavily on program changes, process redesign, and technological advancements.

Retirement and Attrition

The departure of employees due to retirement and other reasons is, and will continue to be, a critical issue facing the TCEQ. Within the next five years, 39.2 percent of the TCEQ's workforce will be eligible to retire, with 21 percent eligible to retire by the end of fiscal 2014.

Likewise, turnover is increasing. Although well below the state average of 17.6 percent for fiscal 2013, the TCEQ experienced turnover at 12 percent in fiscal 2013, with voluntary separations, excluding retirement, making up 63 percent of total separations. This potential loss of organizational experience and institutional knowledge poses a significant need for continued careful succession planning for key positions and leadership roles.

An ongoing focus on organizational development and training will also be required. Training and mentoring emerged as the primary strategy identified by agency offices to address skill gaps due to retirements, with hiring methods ranking second.

Table E.1 demonstrates the projected increases in the number of employees eligible to retire from fiscal 2014 through fiscal 2019. The TCEQ estimates that approximately 1,017 employees (39.2 percent) will become eligible to retire by the end of fiscal 2019. Retirement of the agency's workforce at this level could significantly affect the agency's ability to deliver programs and accomplish its mission.

Table E.1. Projection of TCEQ Employees Eligible for Retirement, FYs 2014–2018

Fiscal Year	Projected Retirements	Percent of Total Agency Headcount (2,596)
2014	545	21.0
2015	617	23.8
2016	710	27.4
2017	817	31.5
2018	916	35.3

Data Source: Texas Uniform Statewide Accounting System, as of 1/31/14.

New and Changing Requirements and Initiatives

New federal and state requirements, as well as internal initiatives, will continue to have an agency-wide impact. Offices may be required to change and modify, eliminate, or add programs, processes, and procedures. Also, as a means to provide more timely data, the agency's use of the Web to report and receive information is expanding.

Among other expected program changes, mandates, and initiatives are the following:

- Widespread, persistent drought has affected the water availability, water supply, and water quality programs, causing significant increases in workloads.
- Massive growth and technological advancement in the oil and gas industry continues to result in substantial workload increases and increased coordination with the Texas Railroad Commission and Texas Department of Transportation. As regulations become more complex, demands for compliance assistance have increased.
- Staff continues providing technical assistance to small water systems at risk of water shortages or outages due to drought.
- The drought has resulted in interest in using brackish groundwater for public water supplies. Treatment systems for this groundwater cause a desalination concentrate waste stream; injection wells are a favorable disposal option. A number of municipalities have been identified by the Texas Water Development Board (TWDB) that are in need of a new water supply and have brackish groundwater supplies available for development. The TWDB's 2012 water plan also included the use of aquifer storage and recovery systems and aquifer recharge wells as water-management strategies; both of these technologies use injection wells regulated by the TCEQ UIC Program.
- With the EPA seeking changes to the Safe Drinking Water Act and the Clean Water Act, new and increased workloads are expected to the Office of Water.
- Increased workload due to changing National Ambient Air Quality Standards (NAAQS) for the six criteria pollutants, growing federal and state requirements, and constant changes in the air quality field due to new regulations and technologies bring new and unique technical and policy issues for resolution.
- Texas will likely be designated nonattainment for pollutants other than ozone within the 2015 through 2019 time frame. In addition, it is anticipated that with revised ozone NAAQS will come further ozone nonattainment area designations, with each requiring SIP revision development.
- State implementation plan (SIP) revision requirements are increasing with newly defined mandates. SIP revision development is becoming more complex and the technical requirements are expanding. Developing and coordinating SIP revisions requires intimate knowledge of agency procedures and federal regulations as well as computing and analytical abilities.
- Texas will also be required to submit a SIP revision for regional haze and is expected to continue developing maintenance plans for certain criteria pollutants to show how an area will maintain its attainment status; this will have a direct impact on workload. The EPA's current review schedule for criteria pollutants is: lead in 2014, ozone in 2015, nitrogen dioxide in 2016, and sulfur dioxide and carbon monoxide in 2017. The schedule for the next review of particulate matter is not known at this time.
- The agency adopted the federal Clean Air Act Amendment fee requirement; the new Section 185 program is being implemented. Staff will continue to track and maintain baseline information, alternative credit streams, and annual fee calculations. With ongoing implementation of the program, an additional FTE will be needed.
- Workloads for the Tax Relief for Pollution-Control Property and the Emissions Banking and Trading programs will also significantly

increase with expanded federal and state regulations for environmental protection.

- The TERP Program will continue to increase its workload due to the additional 1,000 to 1,500 contracts that enter into the monitoring portion of the program each biennium. These contracts are in addition to the over 10,000 contracts that are currently being monitored.
- Responding to citizen complaints, media inquiries, and public-information requests; investigating compliance with applicable air and water regulations; and educating regulated entities continues to be a challenge.
- Additional resources will be needed for ongoing deployment of air-monitoring stations as required by federal or state guidelines or in response to citizen concerns and the protection of human health.
- The agency continues to refine processes and procedures for disaster response, including hurricane preparedness activities. This requires the agency to maintain an appropriate level of emergency response equipment, maintenance, training, and personnel. The TCEQ is assisting public water systems in the preparation of emergency plans that will allow them to provide safe drinking water during the recovery phase following a natural disaster.
- House Bill 1600 of the 83rd Legislature (2013, Regular Session) transferred the utility functions of the TCEQ to the Public Utility Commission effective Sept. 1, 2014. Consequently, the duties of the Office of Public Interest Counsel (OPIC) related to utility rates will also cease. With the elimination of those duties, OPIC will be able to expand the agency's role into other areas, including rulemaking and enforcement matters.
- House Bill 2694 of the 82nd Legislature (2011, Regular Session; the TCEQ Sunset Bill) enacted TWC 5.2725 (a), which requires OPIC to prepare an annual report to the commissioners that provides (1) an evaluation of the office's performance representing the public interest; (2) an assessment of the budget needs of the office, including the

need to contract for outside expertise; and (3) legislative or regulatory recommendations under TWC 5.273. This is a continuing duty of the office.

- The TCEQ continues to promote waste reduction and recycling programs, with ongoing implementation of the computer and television recycling programs, and potentially, other legislative mandates related to electronics recycling and product stewardship.
- Agency staff strives to effectively communicate technical and complex environmental quality and natural resource issues of the agency to the state's leadership, elected officials, and stakeholders.
- Developing effective working relationships with new members of the state legislature during a time of significant turnover in officeholders is vital to the TCEQ and its executive management, as is providing timely and accurate analysis of legislation affecting the agency.

Information Technology

To maintain and enhance the agency's level of service, respond to increasing customer demands and expectations, and implement legislative changes, the TCEQ must prepare for a number of issues in the area of information technology (IT). They include:

- New regulatory programs routinely require IT components to be developed and supported; the agency is providing more data and expanding the use of the Web for reporting information and receiving authorizations. In order to implement the flow of electronic information between the regulated community and the public, business processes must be analyzed and documented. The program areas will need to develop proficiency in analysis and design in order to facilitate implementation. The challenge will be to ensure that staff is capable of building and using these tools effectively and efficiently.
- Modifying, maintaining, expanding, and/or automating existing database, reporting, and storage capabilities, as well as new initiatives to allow greater public access to agency records,

will require large commitments in funding and manpower resources.

- Keeping the skill levels of employees up to speed with constantly changing Web and related technology, including advocating for increased skill-sets around the agency, remains a challenge.
- Developing a Web-based application for reporting performance measures will increase efficiencies.
- As the agency moves toward delivering more digital content—training, public education, and other informational materials—for use on TCEQ websites, we will have to produce content in HD (high definition) as SD (standard definition) fades away. Accessibility requirements for video will increase as the agency’s video production increases.
- In response to an increased demand for real-time data, additional staff will require training on applicable technology in the areas of environmental and compliance monitoring.
- Maintaining and improving online access and navigation (both internal and external) allows for quick dissemination of information to large groups, both in “real time” and customized, through increasing and varied access points, such as mobile devices, collaboration tools, and social media. This includes restructuring to adequately support content management.
- The agency’s Permitting and Registration Information System (PARIS), Authorization and Remediation Tracking System (ARTS) database, Consolidated Compliance and Enforcement Data System (CCEDs), and Central Registry will disseminate data electronically to the EPA’s National Environmental Information Enterprise Network (NEIEN), with the Phase I dataflow going into production in 2014. This will require extensive training and procedural updates.
- Skills are needed to implement the four primary IT initiatives in the Information Strategic Plan:
 - Content Management System. Develop an electronic-document management system for efficient internal and external retrieval.
 - Information Gateway. Improve the availability and retrieval of agency information on the Web through a single starting point.
 - Enterprise GIS. Build an agency enterprise GIS system with an external interface for customers to search for information spatially.
 - Enterprise Modernization. Replace legacy applications with contemporary technology.

Equipment, technology, and training resources are not sufficient to maintain competencies and improve efficiencies. The agency will continue to monitor funding and examine program efficiencies, monitor and manage staff workloads, and evaluate the need for projects as funding reductions affect the agency.

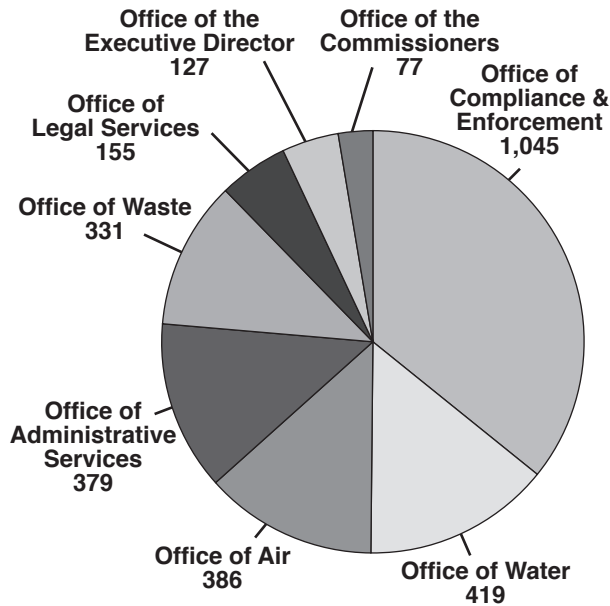
In addition, increased activity in rural areas of the state has affected daily travel requirements to conduct investigations and respond to complaints.

Another key concern is ensuring that agency salaries keep pace with the cost of living and that increases and salaries are competitive. Recruitment and retention of qualified staff is critical to the ability of the agency to effectively carry out its objectives. It is imperative that quality replacements be found, trained, and retained. Certified and licensed staff are highly marketable outside of the agency, which results in turnover and lower experience levels in the remaining staff. Ensuring that agency salaries are competitive with other organizations using similar skill sets continues to be a challenge.

Current Workforce Profile (Supply Analysis)

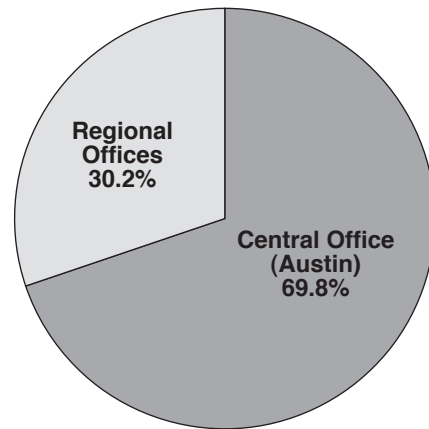
In fiscal 2013, the TCEQ employed a cumulative total of 2,919 employees, which includes 323 separated employees. The following chart (Figure E.1) summarizes the agency workforce by office (the offices are now largely organized by media). The totals indicate an actual head count of employees, not full-time equivalents (FTEs), and do not include contractors or temporary personnel.

**Figure E.1.
TCEQ Employees by Office, FY 2013**



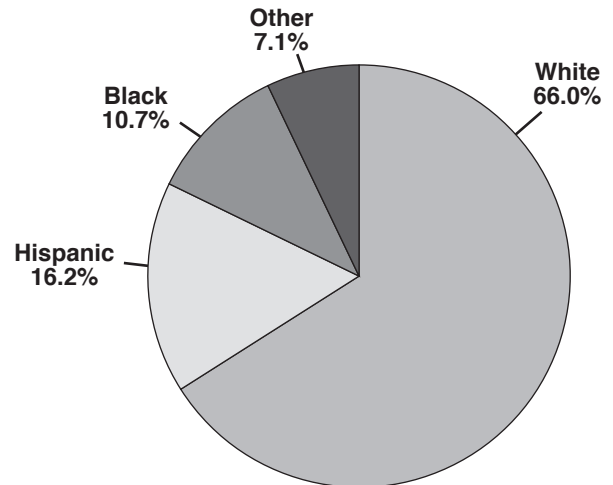
Note: Data includes separations.
Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

**Figure E.2.
TCEQ Employees by Location, FY 2013**



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

**Figure E.3.
TCEQ Employees by Ethnicity, FY 2013**



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Location of Employees

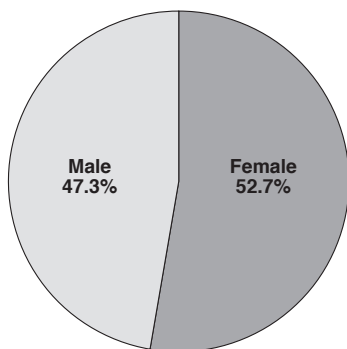
As of Aug. 31, 2013, 784 employees—or 30.2 percent of the total workforce—were located throughout the 16 regional offices (see Figure E.2). In an effort to facilitate delivery of the agency’s services at the point of contact and to increase efficiencies, 110 (14%) of the regional employees were matrix-managed staff who worked in regional offices, but were supervised from the Central Office.

Workforce Demographics

Figures E.3 and E.4 illustrates the agency’s workforce during fiscal 2013. Blacks and Hispanics constituted 26.9 percent of the agency’s workforce, with other ethnic groups representing over 7 percent. The available Texas labor force for Blacks is 12.1 percent; for Hispanics, it’s 33.1 percent. This reveals an under-utilization of over 18 percent, a decrease of 2 percent from the previous Workforce Plan, which can be attributed to the decrease in the available Texas labor force for Hispanics.

In fiscal 2013, the TCEQ workforce was 47.3 percent male and 52.7 percent female. These percentages indicate a small change from the last reporting period of fiscal 2011 (males, 48.6%; females, 51.4%). The available Texas labor force for males is 54.3 percent; for females, it’s 45.7 percent. This is a 7 percent under- and over-utilization, respectively, in these categories.

Figure E.4.
TCEQ Employees by Gender, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

The TCEQ Workforce Compared to the Available Texas Civilian Labor Force

The TCEQ workforce comprises four employee job categories, as established by the Equal Employment Opportunity Commission (EEOC). These categories are: official/administrator, professional, technical, and administrative support.

Table E.2 and figures E.5, E.6, and E.7 compare the agency workforce as of Aug. 31, 2013, to the available statewide civilian labor force as reported in the *Equal Employment Opportunity and Minority Hiring Practices Report*, a publication of the Civil Rights Division of the Texas Workforce Commission (January 2013). This table reflects the percentages of Blacks, Hispanics, and females within the available statewide labor force (SLF) and the TCEQ workforce.

Although minorities and females are generally well represented at the TCEQ, the agency’s ability to mirror

the available statewide labor force remains difficult. During fiscal years 2012 and 2013, the agency resumed hiring activities and saw significantly increased volume.

The SLF percentages increased for Blacks in all job categories, increasing the gap of under-representation at the TCEQ in all job categories. The Black workforce at the TCEQ remained relatively unchanged, with slight decreases in the Technical and Administrative Support job categories. While the Hispanic SLF percentages declined, the TCEQ remains under-represented in all job categories for Hispanics as well. The female SLF percentages decreased significantly in the Technical job category; however, the agency remains under-represented by almost 12 percent. Females at the agency are well represented in the Administrative Support job category. Official/Administrator and Professional job categories increased by almost 2 percent and almost 6 percent, respectively; females within the agency are under-represented in each. The agency continues to strive to employ a labor force representative of the available Texas workforce.

Workforce Qualifications

The TCEQ employs a highly qualified workforce in a variety of program areas, performing complex and diverse duties. Strong employee competencies are critical to meet program objectives and goals.

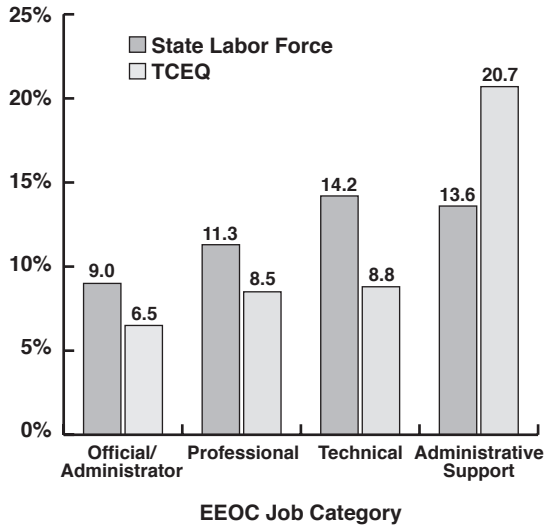
Over 24 percent of the TCEQ’s job classifications require a bachelor’s degree (see Figure E.8.). Another 63 percent require a degree; however, related experience may substitute for this requirement. The remaining positions not requiring a degree constitute 13 percent of the agency’s workforce.

Table E.2. TCEQ Workforce Compared to Available Statewide Labor Force, 8/31/11

EEOC Job Category	Black		Hispanic		Female	
	SLF	TCEQ	SLF	TCEQ	SLF	TCEQ
Official/Administrator	9.0%	6.5%	19.5%	15.2%	39.3%	41.6%
Professional	11.3%	8.5%	17.4%	13.8%	59.1%	46.0%
Technical	14.2%	8.8%	21.4%	14.4%	41.5%	29.6%
Administrative support	13.6%	20.7%	30.5%	24.8%	65.6%	85.3%

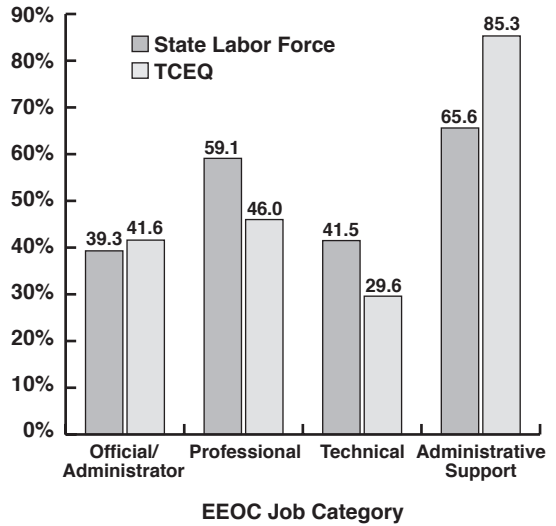
Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Figure E.5.
TCEQ Black Workforce Compared to Available
Statewide Black Labor Force, FY 2013



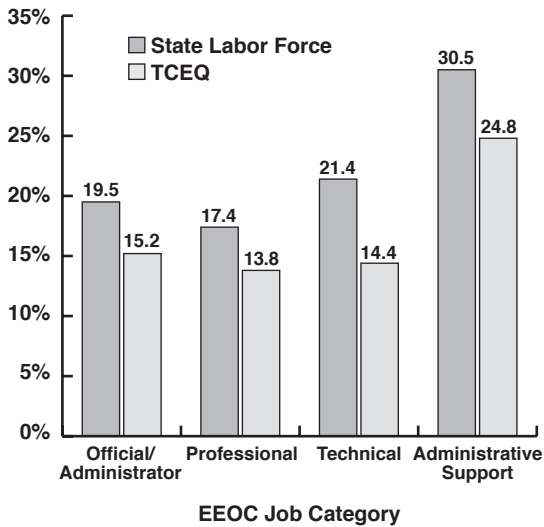
Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Figure E.7.
TCEQ Female Workforce Compared to Available
Statewide Female Labor Force, FY 2013



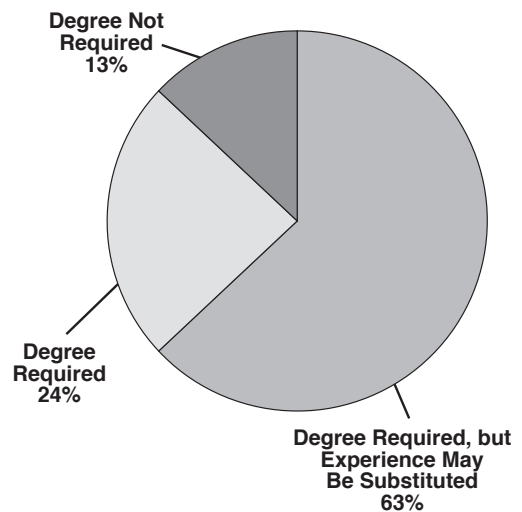
Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Figure E.6.
TCEQ Hispanic Workforce Compared to Available
Statewide Hispanic Labor Force, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Figure E.8.
Education Requirements of
TCEQ Employees, FY 2013

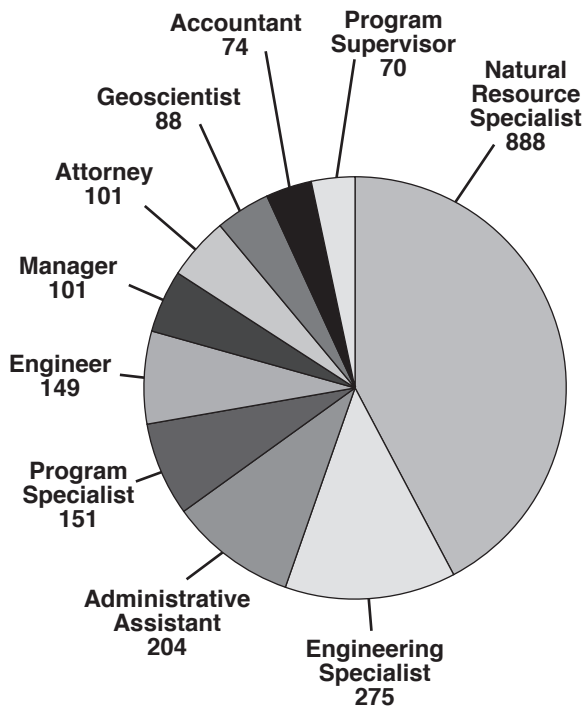


Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Workforce Profile by Job Classification

Although over 75 percent of the agency’s employees are categorized as Officials/Administrators and Professionals, the work fulfilled by TCEQ employees is diverse, requiring the use of over 300 job classifications and sub-specifications. Figure E.9 represents the ten most frequently used job classification series in fiscal 2013.

Figure E.9.
TCEQ Employees by Job Classification Series, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

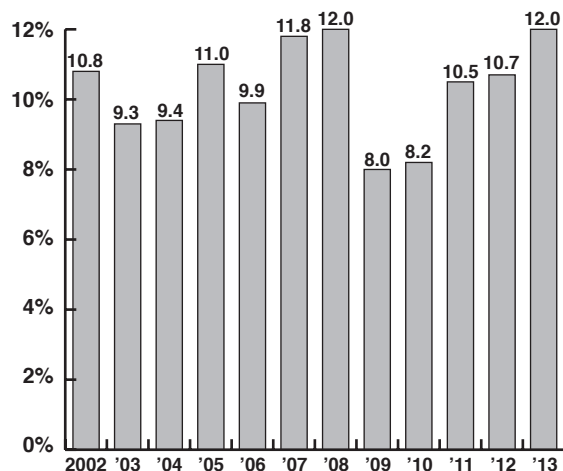
By the end of the fourth quarter of fiscal 2013, the TCEQ supplemented its workforce with 62 contracted staff to provide vital program support, manage workloads, and perform various information technology functions as a means of meeting agency goals and objectives.

Employee Turnover

Turnover has increased to its highest level since 2008. Although the agency’s turnover has increased (see Figure E.10), it consistently remains below statewide turnover. For example, in fiscal 2013, the statewide turnover rate was 17.6 percent, in comparison to the TCEQ’s turnover rate of 12.0 percent. While this rate is higher than the fiscal 2012 turnover rate of 10.7 percent, the agency continues to enjoy a lower turnover than the reported statewide turnover. This can be attributed to the agency’s retention efforts, as well as to the current economic climate. It is incumbent that the agency use strategies to attract and retain highly skilled staff.

While the TCEQ has been very fortunate to retain a highly qualified workforce, changes to the state’s retirement and benefits plan, as well as a recovering economy, may affect future retirement decisions, as well as our ability to recruit.

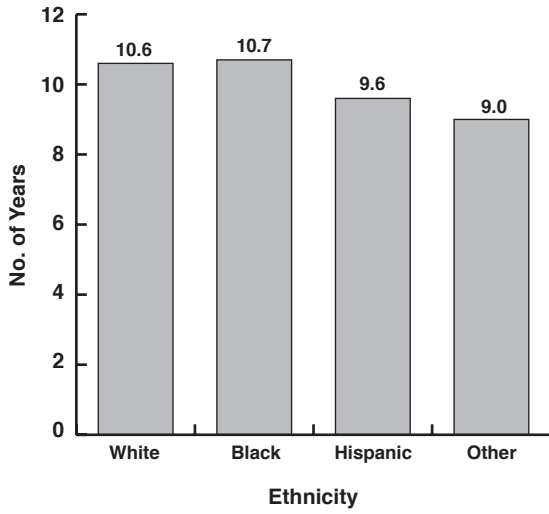
Figure E.10.
TCEQ Employee Turnover Rate, FYs 2002–2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

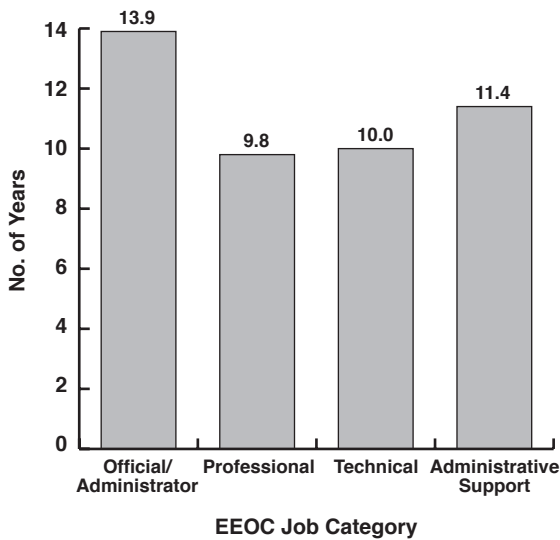
See Figures E.11 and E.12 for additional information about the average tenure of the TCEQ workforce, which remains relatively stable.

Figure E.11.
TCEQ Employee Average Tenure
by Race, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Figure E.12.
TCEQ Employee Average Tenure
by EEOC Job Category, FY 2013



Data Source: Texas Uniform Statewide Accounting System, as of 8/31/13.

Future Workforce Profile (Demand Analysis)

The TCEQ carries out its mission through broad and diverse activities. These activities require that employees demonstrate a high level of proficiency in a variety of critical skills. Table E.3 is a listing of sets of critical “skill clusters” that have been identified as the skill sets necessary to accomplish the agency’s mission.

Table E.3. Critical Workforce Skill Clusters within the TCEQ Offices

Problem Solving
Analysis
Critical thinking
Decision making
Innovation
Information Management
Database development, management, and integration
Software proficiency
Web development and maintenance
Computer-assisted tools
Graphic design
Electronic reporting
Technical Knowledge <i>(may be unique to a certain program area)</i>
Agency policies, procedures, and programs
Local, state, and federal laws, rules, and regulations
Specialized technical knowledge
Policy analysis and development
Statistical analysis
Regulation analysis and development
Technical analysis
Research
Litigation
Auditing
Inventory management
Project Management
Organizing
Planning
Managing multiple priorities
Quality analysis and process improvement
Coordination

continued on next page

Table E.3. Critical Workforce Skill Clusters within the TCEQ Offices (continued)

Communication
Written – composition and editing
Oral – public speaking and presentation
Interpersonal sensitivity
Translating technical information into layperson’s terms
Teamwork
Marketing and public relations
Customer service
Management/Leadership
Interpersonal skills
Performance management
Strategic planning
Conducting training
Mentoring
Meeting planning/facilitation
Contract management
Grant management
Financial management
Delegation
Administrative/Support
Word processing
Tracking and record keeping
Mail processing

The agency continues to emphasize and support workforce and succession planning. This process involves building a viable talent pool that contributes to the current and future success of the agency, including the need for experienced employees to mentor and impart knowledge to their potential successors. Such initiatives will enable the agency to identify the skills, knowledge, and abilities needed to maintain our organizational excellence and to strengthen the skills of up-and-coming staff.

The agency strives to compete in the marketplace for certain disciplines, such as science and engineering. The predominant occupations used at the TCEQ—such as, for example, environmental engineer, scientist, and geoscientist—require STEM (science, technology, engineering, and math) degrees; however, the number of degrees to be awarded in these fields is expected to fall short. According to the U.S. Bureau



of Labor Statistics, these occupations are projected to grow by 17 percent by 2018, compared to 9.8 percent job growth for non-STEM occupations. STEM occupations command higher wages, earning as much as 26 percent more than their non-STEM counterparts. Jobs in computer-systems design and related services are projected to grow by 45 percent by 2018. The occupations with the fastest growth in upcoming years—such as biomedical engineer, network systems and data communications analyst, and medical scientist—all call for degrees in STEM fields.

The ability to recruit people with information-technology skills will also be essential. Network and computer-systems analysts are projected to have a faster-than-average job growth, at 25 percent, with network administrator, software engineer, and database administrator maintaining a high profile as fast-growing occupations in Texas and elsewhere.

Gap Analysis

Each office within the TCEQ analyzed the anticipated need for each skill set and the possible risk associated with the skill being unavailable over the next five years. Skills that are “at risk” are indicated in Table E.4, prioritized by “low,” “medium,” or “high,” reserving the “high” designation for those gaps that will require action to address them.

Table E.4. Critical Skills Checklist and Gap Analysis

LEGEND	
CO – Office of the Commissioners	OLS – Office of Legal Services
ED – Office of the Executive Director	OOW – Office of Waste
OAS – Office of Administrative Services	OCE – Office of Compliance & Enforcement
OA – Office of Air	OW – Office of Water

Skill Category	Skill	CO	ED	OAS	OA	OLS	OOW	OCE	OW
Problem Solving	Analysis				Med				
	Critical thinking				High				
	Decision making				Med				High
	Innovation			Med	High				High
Information Management	Database development, management, and integration	Med			High			High	High
	Software proficiency	Med			Med				High
	Web development and maintenance	Low			Med			Med	Med
	Computer assisted tools	Med		Med	Med				
	Graphic design								Med
	Electronic reporting	Low			High			High	High
	Other: Hardware								High
Technical Knowledge (may be unique to certain program areas)	Agency policies, procedures, and programs				Med			High	High
	Local, state, and federal laws, rules, and regulations			Low	Med			High	High
	Specialized technical knowledge	Med		High	High		High	High	High
	Policy analysis and development	Med			Med			High	High
	Statistical analysis	Med			Med			Low	
	Regulation analysis and development				Med			High	High
	Technical analysis	Med			Med				Med
	Research				Med				
	Litigation								
	Auditing	Med							Med
	Inventory management								
	Other: GIS, GeoDatabase								Med
	Other: Strategic-plan development			Med					
	Other: Fiscal note process			Med					
Other: Performance measure analysis and development			Med						

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Table E.4. Critical Skills Checklist and Gap Analysis (continued)

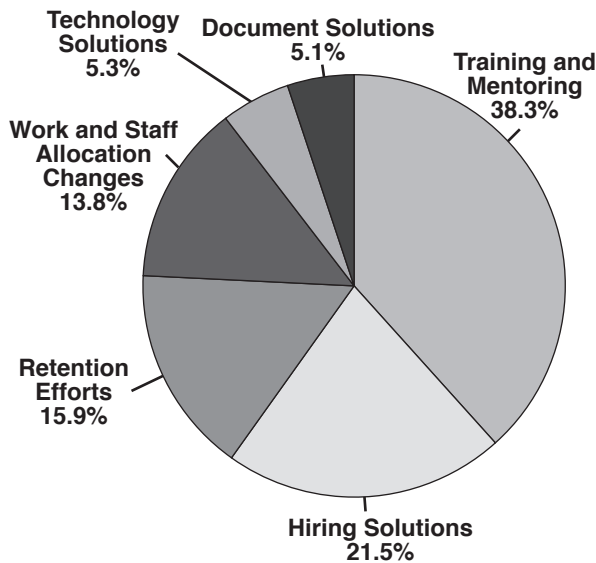
Skill Category	Skill	CO	ED	OAS	OA	OLS	OOW	OCE	OW
Project Management	Organizing								
	Planning								
	Managing multiple priorities	High			Med				Med
	Quality analysis and process improvement				Med			High	Med
	Coordination								
	Other: Business analysis			High					
Communication	Written: Composition and editing	Med		Med	Med			High	
	Oral: Public speaking and presentation	Med		Med				High	
	Interpersonal sensitivity	Med							
	Translating technical information into layperson's terms			Med	Med			High	
	Teamwork	High							
	Marketing/public relations			Med	Med			High	
	Customer service								
	Other: Business process documentation and knowledge transfer				Med				
	Other: Spanish-speaking staff for hearing questions and other customer-service issues								Med
Management/Leadership	Interpersonal skills							High	
	Performance management				Med			High	
	Strategic planning				Med			High	Med
	Conducting training	Med		Low					
	Mentoring	Low		Low	Med			High	
	Meeting planning/facilitation	Med							
	Contract management			Med	Med				High
	Grant management				Med		High		High
	Financial management				Med				High
	Delegation	Med		Low					
Administrative Support	Word processing								
	Tracking/record keeping								
	Mail processing								
Other Skills	Other: Database design and programming	Med							

Strategy Development

The TCEQ anticipates implementing key strategies, which are discussed in the following sections, to address expected skill gaps. Figure E.13 displays the strategies that were identified by agency offices.

As in past assessments, Training and Mentoring will be the primary focus, followed by Hiring Solutions, to ensure that the TCEQ aligns appropriate personnel with the necessary skill sets to fulfill the agency’s core functions. These strategies changed less than 1 percent from the previous Workforce Plan. There is a slight increase in the planned use of Work and Staff Allocation Changes (almost 3%) and Technology Solutions (over 2%). Retention Efforts to remedy projected skill gaps decreased about 4 percent. The use of strategies as indicated below reflects an awareness among hiring supervisors that there is a critical need to continue developing current staff skills while also hiring a future workforce with the critical skills needed.

Figure E.13.
TCEQ Strategies to Address Skill Gaps



Data Source: Office Workforce Plan, TCEQ, March 2014.

Some of the specific strategies mentioned by agency offices are:

- Develop viable options to recruit, obtain access to, contract with, or train staff in critical-needs areas.
- Seek transition positions to allow new junior, interim, or training positions until full technical positions become available through attrition or retirement.
- Allow adjustment of position sweep dates to provide flexibility to re-post available positions when needed by the program areas.
- Continue to document processes and procedures for core functions and produce guidance documents to record the protocol used for specialized decision-making.
- Develop tools (checklists, flow diagrams, guidance documents, desktop tools) to assist staff and the regulated community.
- Assign staff to special projects to increase their knowledge base.
- Allow staff to obtain college credit by utilizing the agency’s tuition-reimbursement program.
- Assign backups to positions where medium and high gaps are identified and include these responsibilities on the backup’s performance plan.
- Hold peer-review meetings to discuss common areas of concern and to ensure consistency in the processing of approvals, applications, permits, and authorizations.

Training and Mentoring

It is evident that mentoring, job shadowing, on-the-job training, and cross-training will continue to be critical to maintaining institutional knowledge and technical expertise as well as to developing and enhancing critical workforce skills. This will allow less-tenured staff to work with senior subject-matter experts, with the goal of developing and sharpening specific skills. It is also vital that the TCEQ provide quality training and professional development that focus on agency and division critical skills, competencies, and technical requirements for all employees. Staff should be afforded

the opportunity and encouraged to attend training that promotes personal and professional development.

The TCEQ will continue developing future leaders with the Aspiring Leaders Program. This program provides developmental and promotional opportunities for in-house talent to rise in management positions that support the agency's long-term objective for a team with a strong institutional-knowledge base.

Travel funds could affect efforts to ensure that staff remains knowledgeable of scientific and technological changes, by limiting the ability to attend specialized technical training or to participate in national technical organizations and initiatives. As agency resources are limited, the Human Resources and Staff Services (HRSS) Division is asked to enhance technical and leadership training, while maximizing training dollars. As a means to accommodate budget constraints, the agency is turning to developing in-house classes and online training.

Hiring Solutions

While the agency has limitations on FTE levels, offices may address these restrictions by realignment, the elimination of unnecessary programs, and documenting and streamlining business processes to maintain a consistent level of regulatory oversight and customer service. Offices will pursue hiring above the entry level for jobs that are hard to fill due to the competitive market base. In addition, the continuation of internship programs has proven to be a successful avenue for hiring employees that have an interest and experience in environmental work.

The TCEQ has a commitment to employing a qualified and diverse workforce. The recruitment program maintains a strong diversity focus and is committed to building a quality workforce. Recruitment events are regularly planned to target qualified ethnic minority and female candidates. The increased recruitment efforts necessitate a continued presence at events, while operating within limited agency resources.

The TCEQ will continue to analyze hiring practices and determine opportunities for enhanced workforce diversity through usage of the Express Hire Program at

diversity-focused events and predominantly minority colleges and universities. This program allows hiring supervisors to identify and hire qualified applicants for job vacancies on the spot at recruiting events. A final review of the applicant's qualifications, along with other hiring requirements, is conducted later.

Hiring supervisors also have the benefit of utilizing the agency's Transitions Hiring Program, which provides a diverse applicant pool to expedite hiring for entry-level positions requiring a degree. Recruiters actively recruit at colleges and universities and at professional events throughout the state. Hiring supervisors have access to a pool of graduating or recently graduated college students from diverse backgrounds for professional entry-level positions.

Retention Efforts

Retention of qualified staff remains a continuing challenge in a competitive market. Offices plan to retain individuals who possess essential skills by providing opportunities for increased responsibility (promotions) and salary enhancements to recognize and reward exceptional performance. The TCEQ will also continue to provide developmental opportunities for employees to focus on critical skills, competencies, and technical requirements needed by the agency. It is vital to develop employees to offset potential losses in staff with technical expertise, institutional knowledge, and management experience.

Other retention strategies will include the continued use of recognition and administrative-leave awards and flextime or other alternative work-hour schedules to support a more flexible and mobile workforce. In addition, HRSS administers employee programs to promote the health, well-being, and education of employees, and to promote a sense of community throughout the TCEQ.

Work and Staff Allocation Changes

Managers continue to review workforce needs and available skill sets to ensure that adequate staff are assigned to meet the business needs of the agency. Offices indicate that the strategies most utilized in

this area will be to assign backups to every position, include these backup responsibilities in their performance plan, restructure jobs, revise functional job descriptions, and, in some instances, involve entry- and journey-level positions in senior decision making. Managers may also pursue process redesign as a means to improve efficiencies and reduce the risk associated with a potential loss of specialized skill sets.

Documentation and Technology Solutions

Managers understand the need for documenting processes and procedures to ensure that tools are

available for training purposes and continuity of operations. Documenting processes and procedures also provides a basis for streamlining core functions and can be used for specialized decision-making. Development of tools (checklists, flow diagrams, guidance documents, desktop tools) that can be used by both staff and the regulated community will also streamline and communicate processes and answer frequently asked questions. Technological solutions will continue to allow the agency to reallocate its human resources. Offices are encouraged to research and seek approval to purchase appropriate technology as well as utilize existing technology.

TCEQ Survey of Employee Engagement, 2013

The Survey of Employee Engagement (SEE), formerly known as the Survey of Organizational Excellence, or SOE, gauges employee perceptions about working for the TCEQ. The survey framework assesses workplace dimensions capturing the total work environment. Each workplace dimension consists of survey constructs. The survey constructs are designed to profile organizational comparison with areas of strength and concern so that interventions can be targeted appropriately.

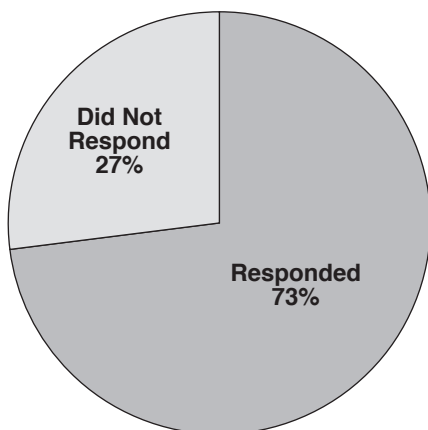
Agency Participation

Overall Response Rate

Out of the 2,577 employees who were invited to take the survey, 1,892 responded. As a general rule, rates higher than 50 percent suggest soundness. Rates lower than 30 percent may indicate problems.

At 73 percent, our response rate is considered high. High rates mean that employees have an investment in the organization, want to see the organization improve, and generally have a sense of responsibility to the organization. With this level of engagement, employees have high expectations for leadership to act on the survey results.

Figure F.1.
Survey Response Rate, 2013

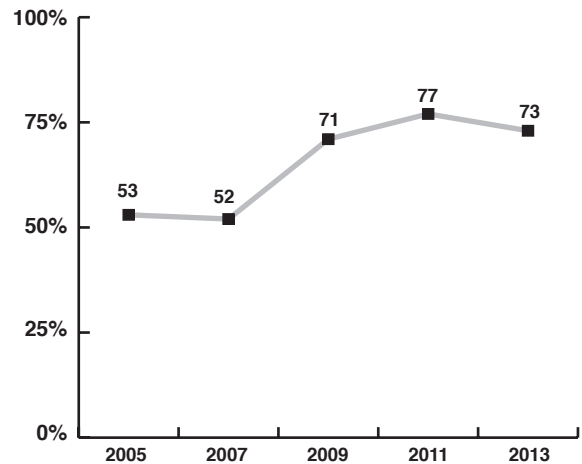


Data Source: Institute for Organizational Excellence, UT Austin.

Response Rate Over Time

One of the values of participating in multiple iterations of the survey is the opportunity to measure organizational change over time. In general, response rates should rise from the first to the second and succeeding iterations. If organizational health is sound and the online administration option is used, rates tend to plateau around the 60 to 65 percent level. A sharp decline in the response rate over time can be a significant indicator of a current or potential developing organizational problem.

Figure F.2.
Survey Response Rate, 2005–2013



Data Source: Institute for Organizational Excellence, UT Austin.

Areas of Strength

The survey identifies three constructs that are relative strengths for the organization.

Employee Development

Score: 389

The Employee Development construct is an assessment of the priority given to employees' personal- and job-growth needs. It provides insight into whether the culture of the organization sees human resources as the most important

resource or as one of many resources. It directly addresses the degree to which the organization is seeking to maximize gains from investment in employees.

High scores here indicate that employees feel that the organization provides opportunities for growth in organizational responsibilities and personal needs. Maintaining high scores requires providing both resources and challenges for employees.

Supervision

Score: 387

The Supervision construct provides insight into the nature of supervisory relationships within the organization, including aspects of leadership, the communication of expectations, and the sense of fairness that employees perceive between supervisors and themselves.

High scores here indicate that employees view their supervisors as fair, helpful, and critical to the flow of work. Maintaining these high scores will require leadership to carefully assess supervisory training and carefully make the selection of new supervisors.

Physical Environment

Score: 387

The Physical Environment construct captures employees' perceptions of the total work atmosphere and the degree to which employees believe that it is a "safe" working environment. This construct addresses the "feel" of the workplace as perceived by the employee.

High scores here indicate that employees view their work setting positively. It means that the setting is seen as satisfactory and safe, and that adequate tools and resources are available.

Areas of Concern

The survey identifies three other constructs that are relative concerns for the organization.

Pay

Score: 229

The Pay construct addresses perceptions of the overall compensation package offered by the organization. It

describes how well the compensation package "holds up" when employees compare it to that of similar jobs in other organizations.

Low scores here suggest that pay is a central concern or reason for satisfaction or discontent. In some situations, pay does not meet comparables in similar organizations. In other cases, individuals may feel that pay levels are not appropriately set to work demands, experience, and ability. Cost-of-living increases may cause sharp drops in purchasing power and, as a result, employees may view pay levels as unfair. Remedying Pay problems requires a determination of which of the above factors are responsible.

We can address the low scores in Pay by reviewing comparable positions in other organizations, cost-of-living information, and the employee feedback sessions.

Internal Communication

Score: 334

The Internal Communication construct captures the organization's communications flow top-down, bottom-up, and across divisions or departments. It addresses the extent to which communication exchanges are open and candid, and move the organization toward its goals.

Average scores here suggest that employees feel that information does not arrive in a timely fashion and that it is often difficult to find needed facts. In general, problems with Internal Communication stem from the following three factors:

- An organization that has outgrown an older, verbal culture that is based on a few people knowing "how to work the system."
- Lack of investment and training in modern communication technology.
- Possibly, vested interests that seek to control needed information.

We can address the low scores in Internal Communication by reviewing existing policies and procedures to determine their availability, assessing how well telephone systems are articulated and whether e-mail, faxing, and Internet modalities are developed and in full use.

Information Systems

Score: 347

The Information Systems construct provides insight into whether computer and communication systems enhance employees’ ability to get the job done by providing accessible, accurate, and clear information. The construct addresses the extent to which employees feel that they know where to get needed information, and that they know how to use it once they obtain it.

Average scores here suggest that room for improvement exists and there is frustration with securing needed information. In general, a low score stems from the following three factors:

- Traditional dependence on word of mouth.
- Low investment in appropriate technology.
- A possibility of some persons using their control of information to control others.

We can address the low scores by conducting a study to determine the causative factors. Each program group should list what information is needed and how they access it. Also, we can use the employee feedback sessions to make a more complete determination of the factors that influence the Information Systems score.

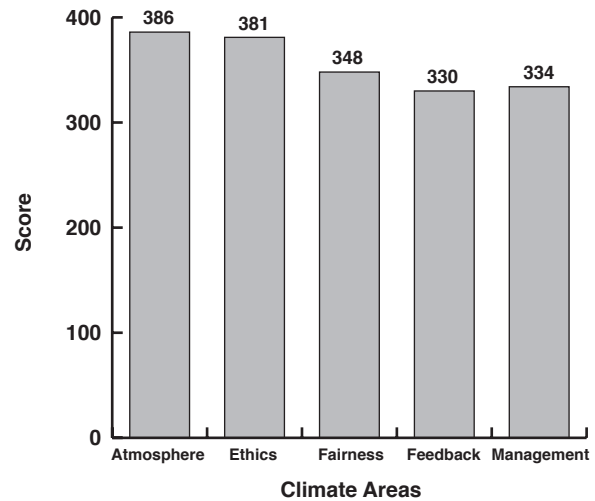
Climate Analysis

The climate in which employees work determines, to a large extent, the efficiency and effectiveness of an organization. The appropriate climate is a safe, non-harassing environment with ethical employees who treat each other with fairness and respect. Moreover, it is an organization with proactive management that communicates and has the capability to make thoughtful decisions. “Climate areas” have been color-coded to highlight the organization’s areas of strength and its areas of concern. The two highest-scoring climate areas are in blue (Atmosphere, Ethics), the two lowest-scoring climate areas are in red (Feedback, Management), and the remaining climate area is in yellow (Fairness).

Each climate area is displayed below with its corresponding score. Scores above 350 suggest that employees perceive the issue more positively than

negatively, and scores of 375 or higher indicate areas of substantial strength. Conversely, scores below 350 suggest that employees view the issue less positively, and scores below 325 should be a significant source of concern for the organization and should receive immediate attention.

Figure F.3.
2013 Survey: Climate Analysis



Data Source: Institute for Organizational Excellence, UT Austin.

Climate Definitions

- Atmosphere** An organization must be free of harassment in order to establish a community of reciprocity.
- Ethics** A foundation for building trust within an organization, where not only are employees ethical in their behavior, but ethical violations are appropriately handled.
- Fairness** The extent to which employees believe that equal and fair opportunity exists for all members of the organization.
- Feedback** An essential element of organizational learning, by providing the necessary data in which improvement can occur.
- Management** Accessible, visible, and an effective communicator of information is a basic tenet of successful leadership.

Next Steps: Interpretation and Intervention

Agency management is currently conducting a review of the Survey of Employee Engagement survey results with a focus on elements that did not score

as well as others. The executive director and deputy executive director are working with the deputies to determine the most appropriate and effective manner to bring staff from throughout the agency together to develop recommendations and actions to address these areas.