Sumset Advisory Commission


Texas Natural Resource Conservation Commission
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## SUNSET ADVISORY COMMISSION

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> In 1977, the Texas Legislature created the Sunset Advisory Commission to identify and eliminate waste, duplication, and inefficiency in government agencies. The 10 -member Commission is a legislative body that reviews the policies and programs of more than 150 government agencies every 12 years. The Commission questions the need for each agency, looks for potential duplication of other public services or programs, and considers new and innovative changes to improve each agency's operations and activities. The Commission seeks public input through hearings on every agency under Sunset review and recommends actions on each agency to the full Legislature. In most cases, agencies under Sunset review are automatically abolished unless legislation is enacted to continue them. This report is the Commission staff's recommendations, which serves as the starting point for the Commission's deliberations.

# Texas Natural Resource Conservation Commission 

Sunset Staff Report



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## Summary

## Overview

Greater assurances of compliance with environmental standards by the regulated community are needed to adequately ensure the protection of Texans' health and the environment. While the Sunset staff review of the Texas Natural Resource Conservation Commission recognizes that the agency serves a vital mission, it concluded that a performance-based regulatory approach would allow the State to expand beyond a traditional, prescriptive approach focused on outputs, to one that better integrates performance incentives, regulatory flexibility, and innovation. The new regulatory structure should encourage action greater than minimum requirements to allow success in addressing persistent environmental problems, such as poor air quality in the state's largest cities, or emerging issues like water quality and nonpoint source pollution.
The Sunset review determined that the current regulatory structure relies more on the agency, rather than the regulated community, to ensure compliance with environmental requirements. The recommendations in this report would begin to shift this emphasis onto regulated entities, extending the Legislature's interest in voluntary compliance while increasing the accountability for these entities' performance. In addition, the report concluded that strengthening programs that support the agency's regulatory efforts would improve regulation in the following ways.

- Meaningful environmental regulation relies upon quality data and its analysis, as well as research that supports long range objectives. To this end, the staff report recommends that environmental laboratories conducting business with the state be accredited and for the agency to improve the coordination and application of environmental research.
- The Commission makes numerous important permitting and enforcement decisions that directly affect peoples lives, the environment, and the state's economy. The report identifies several concerns related to access to the Commission's decisionmaking processes and makes recommendations to ensure adequate and effective participation by regulated entities and the public.
- The current funding structure for the agency, based largely on dedicated fee revenues, restricts the agency's ability to support efforts that universally affect the ability to effectively regulate or address issues that cross air, water, and waste activities. The report contains recommendations and statutory alternatives that would provide greater funding flexibility to better support the broad needs of the agency.

Taken together, the recommendations in this report are designed to provide more impetus for regulated entities to have a larger stake, and for all affected groups to take a greater role, in protecting the environment, and to better position the agency to address the state's environmental regulatory needs. While the staff did not specifically assess the success of the State's environmental regulation, the agency continues to perform an essential function and should be continued. A summary of the key recommendations and findings for each of the issues identified in this report is outlined below.

## Issues / Recommendations

## Issue 1 TNRCC Lacks Strategic Direction and Innovation in Its Regulatory Structure.

## Key Recommendations

- Require the Commission to distinguish regulatory tiers based upon levels of compliance with environmental regulations and to offer incentives within each tier.
- Expand the scope of the Waste Reduction Advisory Committee to advise TNRCC on the implementation of an incentive- and performance-based regulatory structure.
- Require the agency to coordinate all innovative regulatory programs through one office.
- Encourage the use of environmental management systems and expand opportunities for public participation.


## Key Findings

- Since its creation, TNRCC has focused on becoming the single environmental regulatory agency envisioned by the Legislature.
- TNRCC primarily operates using the traditional command and control regulatory approach.
- TNRCC's current organization and approach to regulation have limited development of a strategic vision for environmental regulation.
- The current regulatory approach may be inadequate to solve ongoing environmental problems.


## Issue 2 Compliance History is Inconsistently Defined and Applied, Limiting Its Use as a Permitting and Enforcement Tool.

## Key Recommendations

- Require the Commission to develop a common definition for compliance history.
- Require TNRCC to track and report the compliance history of all regulated entities.
- Require TNRCC to develop a performance assessment for regulated entities to determine eligibility for innovative programs, and to establish permit and enforcement guidelines.


## Key Findings

- The Legislature and TNRCC have recognized the importance of holding regulated entities accountable.
- The agency does not comprehensively assess the performance of regulated entities and ultimately its own performance.
- A better approach to compliance history would allow TNRCC to use innovative regulatory schemes currently employed by other states.


## Issue 3 Participation in TNRCC's Innovative Regulatory Programs is Not Performance-Based and Lacks Sufficient Accountability.

## Key Recommendations

- Require TNRCC to apply a higher compliance standard for participation in its innovative regulatory programs.
- Require entities to show a clear environmental benefit to participate in the agency's regulatory flexibility and Supplemental Environmental Project programs.
- Expand marketing, public education, and technical assistance for innovative regulatory programs.
- Expand opportunities for public participation within innovative programs.


## Key Findings

- TNRCC offers regulated entities innovative programs within its predominantly traditional regulatory structure.
- TNRCC does not adequately hold participants in innovative regulatory programs accountable for their compliance performance.
- Despite legislative interest in creating innovative regulatory programs, these programs are not having their intended impact.


## Issue 4 Agency Policies on Upsets and Inspections Are Not Based on the Performance of a Regulated Entity.

## Key Recommendations

- Require regulated entities to demonstrate a good compliance history before they may receive an announced inspection.
- Require TNRCC to track whether inspections are announced or unannounced, and track and report the occurrences of all upset emissions.
- Limit exemptions from possible enforcement for entities with chronic numbers of upsets.


## Key Findings

- Agency policies and rules, which continue to be refined, define how it will conduct inspections and approach unplanned air emissions.
- A lack of information or analysis regarding inspections and upsets hurts the agency's ability to make cost effective decisions about inspections, or to ensure compliance with permit requirements.


## Issue 5 Unregulated Environmental Laboratories Place TNRCC at Greater Risk of Basing Regulatory Decisions on Unreliable Data.

## Key Recommendations

- Require TNRCC to implement a voluntary environmental laboratory accreditation program consistent with national standards.
- Transfer the Safe Drinking Water Lab Assessment Program from the Texas Department of Health to TNRCC.
- Require TNRCC to only accept data/analyses from accredited labs for all decisions affecting permitting, compliance, enforcement, and corrective action.
- Exempt all on-site or in-house labs from accreditation.


## Key Findings

- Oversight of environmental labs providing data to the State is inconsistent and divided between agencies.
- Unregulated, unaccredited labs are more likely to produce inaccurate data for agency decisionmaking, resulting in increased risk to public health and the environment, and increased agency costs.
- Uniform standards provided by a national accreditation program would allow Texas labs to effectively compete with accredited labs in other states.


## Issue 6 State Environmental Regulation Lacks the Benefit of Comprehensive Research on the Long-Term Impacts of Pollution.

## Key Recommendation

- Require TNRCC to coordinate and facilitate agency research needs and efforts.


## Key Findings

- TNRCC performs environmental monitoring and risk assessments, and is involved in independent research efforts.
- Monitoring and risk assessments are insufficient to draw conclusions about long-term impacts of pollutants on human health and the environment.
- Other states have implemented comprehensive research programs to support environmental regulatory efforts.


## Issue 7 The Public's Interest Is Not Adequately Supported in Agency Policymaking.

## Key Recommendations

- Strengthen the Public Interest Counsel by making it a Governor-appointed position, with clear responsibility for representing the public interest in TNRCC rulemaking and the ability to appeal Commission decisions in court.
- Disqualify persons from being appointed to the Commission if they have received significant income from a regulated entity within two years before appointment.
- Require the agency to track and report the use and composition of Commission-appointed and staff-level stakeholder groups and require these groups to be composed of a balanced representation of affected stakeholders.


## Key Findings

- The nature of environmental regulation requires careful consideration of the public's interest in agency decisions.
- The representation of the public interest in environmental matters lacks adequate resources and does not reflect comparable efforts in the regulation of utilities and insurance.
- The public's interest is at a disadvantage on many advisory committees and informal stakeholder groups, and in the agency's internal guidance process.


## Issue 8 Having the Agency as an Advocate For Contested Permits Contributes to a Perception of Unfairness in the Decisionmaking Process.

## Key Recommendations

- Remove the Executive Director as a party in contested permit hearings before the Commission, but allow the Director to present evidence as needed.
- Consolidate permit notice requirements in one statute.


## Key Findings

- State law provides for public participation in TNRCC permitting decisions.
- Statutory notice requirements are confusing for the agency and the regulated community.
- The Executive Director's role in contested cases makes the staff an advocate for permit applications, raising questions about the fairness and objectivity of the decisionmaking process.


## Issue 9 TNRCC Has Not Taken Advantage of Using the Public in Its Compliance Efforts.

## Key Recommendations

- Require TNRCC to conduct an annual assessment of complaints filed with the agency.
- Require the agency to enhance coordination of complaint investigations with local officials.
- Require the agency to implement policies to respond to complaints after normal business hours and allow the submission of citizen-collected evidence for use by the Commission.
- Require the Commission to use cumulative complaint information in the agency's permitting process.
- Require the Commission to enhance public notice of agency enforcement actions.
- Authorize affected persons to intervene in agency enforcement actions that impact their health or property.


## Key Findings

- TNRCC's compliance process involves activities in which the public plays a role, including reporting complaints and commenting on enforcement actions.
- Commission practices and policies limit the collection and use of complaints made by the public.
- Current provisions for notice and comment on agency enforcement actions are inadequate for the public and affected property owners.


## Issue 10 TNRCC's Funding Structure Does Not Appropriately Support the Agency's Activities.

## Key Recommendations

- Authorize TNRCC to expend a percentage of fee revenues to expand innovative regulatory programs and fund multi-media activities.
- Reauthorize the continuation of the Petroleum Storage Tank Remediation fee, at a lower level, to pay for petroleum storage regulations.
- Limit the fee payment reporting methods available to Solid Waste Disposal fee payers.
- Consider other options to improve the stability, equity, and simplicity of TNRCC's fee revenue collections.


## Key Findings

- TNRCC's funding structure lacks flexibility to expand innovative services that benefit the regulated community, stability to adequately fund required regulatory programs, and the ability to provide equity in fee costs among all payers.
- TNRCC's administrative costs could be reduced by simplifying its complex fee structure.


## Issue 11 TNRCC's Fee Structure Lacks Accountability and Limits the Revenues the Agency is Able to Collect.

## Key Recommendations

- Require the submission of all fees on the date payment is due.
- Require fee credits or refunds exceeding $\$ 5,000$ to be approved by fee audit staff.
- Provide fee audit staff authority to issue notice of violations to fee payers, and provide the agency authority to charge standard interest and penalties on all delinquent fees.
- Allow TNRCC's Executive Director to modify penalty and interest amounts only upon good cause and with written explanation.


## Key Findings

- TNRCC's fee collection system lacks accountability to ensure that fees are being properly paid.
- TNRCC assumes administrative costs to adjust fees for payers, which limits the agency's ability to ensure all fees are being paid.
- TNRCC does not consistently apply existing penalty and interest authority to all entities making late payments.


## Issue 12 The Current Regulatory Structure for Low-Level Radioactive Waste Hampers the State's Ability to Administer an Effective Disposal Program.

## Key Recommendations

- Transfer all regulatory authority for radioactive waste disposal from TNRCC to the Texas Department of Health, Bureau of Radiation Control.
- Create a new Division in TNRCC charged with the siting and operation of a low-level radioactive waste disposal facility.


## Key Findings

- The Legislature has assigned regulatory responsibilities for radioactive materials to three state agencies and remains involved in determining appropriate authority.
- The current regulatory structure for low-level radioactive waste disposal creates a conflict of interest and unnecessarily separates radioactive material regulation.
- The State may fail to meet obligations under the Texas Low-Level Radioactive Waste Disposal Compact, providing for the management and disposal of low-level waste.


## Issue 13 Texas Has a Continuing Need for the Texas Natural Resource Conservation Commission.

## Key Recommendation

- Continue the Texas Natural Resource Conservation Commission for 12 years.


## Key Findings

- Texas has a continuing interest in protecting human health and the quality of its natural resources.
- Despite progress, remaining environmental problems and challenges require a continued regulatory effort.
- No other state, local, or private entity exists that can perform TNRCC's core function of protecting the environment.
- While organizational structures vary, all other states use statewide agencies to provide for the administration of environmental laws and protection of human health and the environment.


## Fiscal Implication Summary

This report contains several recommendations that will have a fiscal impact to the State. They are discussed below, followed by a five-year summary chart.

- Issue l-Coordinating the use of innovative regulatory programs may require additional staff outside of existing strategic planning and outreach staff resources. A possible source of funding for these positions, if required, could be made available through greater agency funding flexibility as outlined in Issue 10 of this report.
- Issue 4 - Using unannounced inspections for entities with a poor compliance history could result in additional costs to the agency. The amount could not be estimated for this report.
- Issue 5-Requiring the agency to accredit environmental laboratories conducting business with the state would not result in additional costs to the State, but would be funded by fee payments to cover the costs of administering the program. The accreditation program would require annual revenues of $\$ 427,805$ and an additional five staff positions.
- Issue 7-Strengthening the Public Interest Counsel would require the addition of two staff and the reallocation of resources within the Commissioner's budget to provide two additional staff positions and fund outside technical assistance.
- Issue 8 - Removing the Executive Director as a party from contested case hearings would result in a savings to general revenue of at least $\$ 345,000$ per year and possible staff reductions.
- Issue 10-Streamlining the agency's current fee structure could result in administrative savings. These savings could not be determined for this report. Several options are provided to stabilize the agency's current funding structure that could have significant fiscal impacts if adopted by the Legislature.
- Issue 11 - Improving revenue management would have a positive fiscal impact for the State of $\$ 885,000$ in the first year and $\$ 660,000$ thereafter.
- Issue 12 - Consolidating the regulation of low-level radioactive waste will require the transfer of existing resources from TNRCC to the Texas Department of Health, but will not have a net fiscal impact to the State.

| Fiscal <br> Year | Savings to the <br> General <br> Revenue Fund | Gain in Dedicated <br> Fee Revenue | Cost to <br> Dedicated <br> Fee Revenue | Change in <br> FTEs From <br> FY 2000 |
| :---: | :---: | :---: | :---: | :---: |
| 2002 | $\$ 345,000$ | $\$ 1,312,805$ | $\$ 427,805$ | +5 |
| 2003 | $\$ 345,000$ | $\$ 1,087,805$ | $\$ 427,805$ | +5 |
| 2004 | $\$ 345,000$ | $\$ 1,087,805$ | $\$ 427,805$ | +5 |
| 2005 | $\$ 345,000$ | $\$ 1,087,805$ | $\$ 427,805$ | +5 |
| 2006 | $\$ 345,000$ | $\$ 1,087,805$ | $\$ 427,805$ | +5 |

$\square$
Issues / Recommendations


## Issue 1

## TNRCC Lacks Strategic Direction and Innovation in Its Regulatory Structure.

## Summary

## Key Recommendations

- Require the Commission to distinguish regulatory tiers based upon levels of compliance with environmental regulations and to offer incentives within each tier.
- Expand the scope of the Waste Reduction Advisory Committee to advise TNRCC on the implementation of an incentive- and performance-based regulatory structure.
- Require the agency to coordinate all innovative regulatory programs through one office.
- Encourage the use of environmental management systems and expand opportunities for public participation.


## Key Findings

- Since its creation, TNRCC has focused on becoming the single environmental regulatory agency envisioned by the Legislature.
- TNRCC primarily operates using the traditional command and control regulatory approach.
- TNRCC's current organization and approach to regulation have limited development of a strategic vision for environmental regulation.
- The current regulatory approach may be inadequate to solve ongoing environmental problems.


## Conclusion

TNRCC has concentrated much of its resources on creating the comprehensive environmental regulatory agency envisioned by the Legislature, to the detriment of a strategic vision for its regulatory structure. As a result, TNRCC continues to rely on a traditional command and control regulatory structure which does not adequately support innovation or flexibility, does not reward performance or provide incentives for regulated entities to improve their performance, and cannot solve persistent environmental problems.

The Sunset review identified specific recommendations to help TNRCC create a regulatory structure based on incentives and performance. These recommendations would require a coordinated, strategic regulatory structure that would set the foundation for a tiered system that provides incentives for compliance and encourages regulated entities to take action beyond the minimum requirements of their permits.

## Support

Current Situation: Since its creation, TNRCC has focused on becoming the single environmental regulatory agency envisioned by the Legislature.

- In 1993, the Legislature created TNRCC by combining the Texas Air Control Board, Texas Water Commission, and environmental programs from the Texas Department of Health. The Legislature envisioned the new agency would become the State's single, comprehensive environmental regulatory agency.
- TNRCC's Commission, Executive Management, and staff have focused on achieving the Legislature's vision. The text box, Evolution of TNRCC as an Environmental Agency, details these efforts.


## Current Situation: TNRCC primarily

 operates using the traditional command and control regulatory approach.- TNRCC operates under a traditional regulatory structure that includes prescriptive permits granted through a sometimes lengthy application process; periodic item-by-item inspections; and enforcement action against violators, which includes the assessment of penalties and corrective measures. Congress developed this structure in the 1970s to address the nation's environmental problems, and this approach has not changed much in the past 30 years as the


## Evolution of TNRCC as an Environmental Agency

The agency has focused its efforts on creating an administrative structure, through five major reorganizations of staff and programs, along functional lines of permitting, inspections, and enforcement; rather than along media lines of air, water, and waste. The agency has also concentrated on making its basic operations as effective and efficient as possible. To help in this effort, TNRCC hired a consultant in 1997 to analyze the agency's processes and suggest improvements. In May 1998, the Commission approved the consultant's recommendations resulting in significant changes to the agency's operational structure. ${ }^{\text {. }}$ Environmental Protection Agency (EPA) continues to implement federal environmental laws. TNRCC adopted this structure, and it has helped Texas reduce pollution and improve the State's natural resources.

- The term "command and control" is often used to describe a traditional regulatory structure such as TNRCC's. Command and control regulation involves government not only setting standards for the emission of specific pollutants, but also mandating the means by which industry must attain those standards. ${ }^{2}$ A few of the
limitations of this regulatory structure are discussed in the table: Features and Limitations of Cominand and Control Regulation.

| Features and Limitations of Command and Control Regulation ${ }^{3}$ |  |
| :--- | :--- |
| Features | Limitations |
| Requires a specific technology to <br> reduce emissions. | Discourages technological <br> innovation or reduces the <br> financial incentive to invest in <br> the research and development <br> of new pollution prevention <br> techniques. |
| Creates rule for individual <br> pollutants, media, and control <br> technologies. | Becomes unwieldy and <br> unresponsive to advances in <br> technology and changes in <br> society and the economy. |
| Focuses only on distinct sources of <br> pollution and one pollutant at a <br> time. | Limits the ability to deal with <br> pollution that affects more than <br> one media. |

Problem: TNRCC's current organization and approach to regulation have limited development of a strategic vision for environmental regulation.

- The agency acknowledges a desire to move its regulatory structure away from the traditional approach as evidenced in the guiding principles of the agency's philosophy. Two of the guiding principles are to promote and foster voluntary compliance with environmental laws, and to ensure that regulations promote flexibility in achieving environmental goals. ${ }^{4}$

In addition, TNRCC has begun to take a larger view of the impact of environmental regulation by focusing on determining what environmental problems are of highest priority in different regions of the state, through its Environmental Indicators Project. ${ }^{5}$ While this is an important effort, the agency has not historically determinec: the impact its regulatory efforts have had on these environmental priorities; or how it can use its programs to improve the quality of Texas' air, water, and land.

- The lack of strategic direction in TNRCC's regulatory structure results in the agency administering its limited innovative regulatory programs without a clear definition of their role in the agency or coordination with other programs. For example, TNRCC's innovative programs are housed in different areas of the agency and are not well coordinated. In addition, no division within the agency is responsible

TNRCC has not been able to determine the impact of its regulatory efforts on improvements in environmental quality.

> Regulatory decisions are not constantly based on performance.
for developing a clear view of the role these programs play in the overall function of the agency, or what additional programs the agency could offer.

- The lack of coordination among TNRCC's innovative programs has led to overlap. For example, programs using environmental management systems exist in both the Office of Compliance and Enforcement; and in the Clean Texas Program, administered by the Small Business and Environmental Assistance Division. These initiatives operate independently of one another and have different standards for certification of a management system.
- In 1996, the agency's Office of Compliance and Enforcement began a pilot project to incorporate environmental management systems into TNRCC's regulatory functions. In 1998, the agency's Internal Auditor, with the State Auditor's Office, saw an opportunity to "achieve the full range of benefits offered by management systems, such as compliance assurance, pollution prevention, more efficient. use of resources, and improved environmental performance."\% Although the audit recommended establishing a strategic policy on environmental management systems and initiating a staff workgroup, the agency has taken limited action to date. More information on environmental management systems is provided in the text box, Environmental Management Systems.


## Environmental Management Systems

An environmental management system is an organized set of procedures implemented by the owner or operator of a facility to evaluate the environmental performance, including compliance with regulations, of the facility. A management system does not replace a permit, instead it allows a regulated entity to assess compliance with its permit and to measure environmental performance beyond permit requirements if desired.
TNRCC's environmental management system project, now implemented in three of its regions, allows regulated entities with established environmental management systems and consistently high levels of compliance with environmental regulations to participate. TNRCC inspectors review the management system to verify that it includes all necessary information to assess future compliance. Once a management system is certified by TNRCC's inspectors, an entity will be subject only to abbreviated inspections every other year to audit the management system and determine compliance. ${ }^{7}$

- TNRCC does not consistently base its regulatory decisions on performance. The agency has no standard definition of what information constitutes an entity's compliance history. Further, while some programs consider compliance history in their decisionmaking processes, others do not. This inconsistency can erode trust in the agency by the regulated community and the public. Also, TNRCC
cannot properly recognize and reward entities with consistently high levels of compliance because it does not identify them.

Problem: The current regulatory approach may be inadequate to solve ongoing environmental problems.

- The command and control structure limits TNRCC's ability to ensure accountability. For example, TNRCC is unable to inspect every regulated entity on a regular basis and many entities are never inspected due to a lack of resources. Also, while TNRCC could hold entities accountable through its permitting process by denying or not renewing permits for chronic poor performers, it has not exercised this authority since $1993 .{ }^{8}$
- The traditional regulatory structure cannot solve environmental problems that are not regulated, such as nonpoint source pollution and the cumulative impact of multiple emission sources. For example, according to the federal Clean Water Act, TNRCC must address the state's 200 impaired water bodies by preparing a study for each called a Total Maximum Daily Load. These studies promise to consume significant agency resources over the coming years. However, since unregulated nonpoint source pollution is a major contributor to water quality, TNRCC cannot ensure improvement to the impaired water bodies through traditional regulation.
- Despite the successes of the traditional regulatory structure, Texas still faces serious environmental problems. For instance, Houston and Dallas are struggling to meet federal requirements for air quality, Texas has the highest releases of toxic substances into the environment, and 200 water bodies are considered impaired because they do not meet water quality standards. ${ }^{9}$ While the majority of regulated entities are in compliance with environmental regulations, these problems persist, which suggests that the current regulatory approach may be inadequate to solve these problems.
Opportunity: Several states, including Texas, and EPA, are actively exploring alternatives to command and control regulation.
- To overcome the limitations of the traditional regulatory structure, environmental regulation has changed over the past decade. Environmental experts in the public and private sectors have come to see the benefits of encouraging environmental performance by providing incentives and flexibility to regulated entities. ${ }^{10}$
- Other states have begun to develop regulatory structures that strategically integrate innovative programs into their existing traditional regulatory functions. For example, Wisconsin, Oregon, Georgia, and New Jersey are testing the effectiveness of tiered regulatory structures that offer incentives to entities based on their

> Traditional environmental regulations cannot control all activities that affect the environment.

> Innovative environmental regulations must be performance-based and provide clear requirements and incentives.
commitment to compliance with environmental regulations. ${ }^{11}$ Also, Pennsylvania offers a new way of viewing environmental regulation that intends to incorporate environmental excellence into all operations of its regulatory agency and regulated entities. ${ }^{12}$ Additionally, pollution prevention and environmental management systems play a key role in many states' innovative regulatory structures.
While a recent study prepared for Florida's Department of Environmental Protection determined that these efforts are too new to evaluate their success, it identified several elements that are essential to an effective innovative program, such as requiring participants to prove their performance to receive incentives and offering a welldefined menu of requirements and incentives to participants. ${ }^{13}$

- Environmental management systems are an innovative way to ensure compliance and at least 13 states have implemented programs for expanding and encouraging their use. Also, a working group composed of these 13 states, in conjunction with EPA, have been studying the use and impact on compliance rates of management systems. ${ }^{14}$
- EPA has implemented several innovative programs under its regulatory reinvention initiative. This effort includes programs such as Project XL, Common Sense Initiative, and National Performance Track Program. ${ }^{15}$ The purpose of this reinvention effort is to recognize and provide meaningful rewards to environmental leaders, give assistance and incentives to entities who are meeting the minimum standards, and encourage poor performers to comply. ${ }^{16}$ While these programs have had varying degrees of success, they show EPA's willingness to experiment with and encourage regulatory innovation.
- TNRCC has shown support for innovation through its Clean Texas Program. Clean Texas is a voluntary program that provides benefits to participants in exchange for commitments to emission or waste reductions, community involvement, and other special environmental projects. Benefits of participation include public recognition, technical assistance to meet program goals, and administrative flexibility to streamline the permitting process as much as the agency can within its own policies.
- TNRCC has shown that it can incorporate innovative ideas into its core functions through its Pollution Prevention Integration initiative. In 1998, the agency launched this initiative to increase the integration of pollution prevention activities into the agency's core environmental regulatory programs. The agency established a three-year action plan for incorporating pollution prevention goals into all existing and future regulatory programs. ${ }^{17}$
- In 1989, the Legislature created the Waste Reduction Advisory Committee consisting of nine members representing the regulated community and environmental and civic groups. The duties of the Committee are to advise TNRCC on how to promote waste reduction and minimization, including how best to use agency resources to provide public education and technical assistance. Despite its name and statutory direction, the Committee currently considers a wide range of environmental issues involving air, water, and waste and focusing on pollution prevention, waste minimization, and incentivebased programs to achieve voluntary compliance. To this end, the Committee provided guidance to TNRCC's Small Business and Environmental Assistance Division in the development of the Clean Texas Program and Pollution Prevention Integration initiative.


## Recommendation

## Change in Statute

### 1.1 Require the Commission to distinguish regulatory tiers based upon levels of compliance with environmental regulations.

### 1.2 Require the Commission to offer incentives within each regulatory tier that are proportional to the levels of compliance.

These recommendations would require the Commission, through rulemaking, to create regulatory tiers that allow entities with better environmental performance, as determined by their compliance with regulations, more opportunity to take advantage of innovative and flexible programs offered by the agency. This regulatory structure should include enough tiers to distinguish among poor performers, entities who generally comply with regulations but may not have perfect records, and consistently high performers who are willing to do more than the minimum required by their permits.
This recommendation would not eliminate the traditional regulatory structure. Instead, the traditional structure would serve as the foundation for a more innovative structure that rewards environmental performance. Regulated entities would still be required to obtain permits, be inspected, and have enforcement actions taken against them, if necessary. However, those entities who prove themselves through consistent compliance with environmental regulations would be able to take advantage of incentive programs. The performance of all entities would be defined as described in Issue 2 of this report. Also, each performance level should correspond to current and future incentive programs, including those discussed in Issue 3 of this report.

To create a level playing field for all regulated entities, this new regulatory structure should be phased in over a period of three years. In conjunction with the recommendations in Issue 2 of this report, TNRCC should begin tracking the compliance history of all regulated entities with the intent of using that information to determine what incentive programs each entity is eligible for. Within six months of implementing a compliance tracking system, TNRCC should begin tracking compliance for use in a tiered regulatory system.

### 1.3 Expand the scope of the Waste Reduction Advisory Committee to advise agency staff and the Commission on the implementation of a regulatory structure based on performance.

This recommendation would expand the Waste Reduction Advisory Committee's current statutory language to include the duty of advising TNRCC on how to create a regulatory structure that is more incentive- and performance-based. This statute, along with the Committee's name, would also need to be adjusted to apply to all media, not just waste. The current size and composition of the committee would remain the same. This recommendation would allow the Committee to use its expertise and creativity to help guide the agency in implementing an innovative regulatory structure. To ensure that the Committee's work is recognized by the Commission and Executive Management, the Committee shall report quarterly on its accomplishments, suggestions, future plans, and other topics it considers important.

### 1.4 Require the agency to coordinate all regulatory innovation programs and projects through one office.

To ensure all of TNRCC's current and future innovative regulatory programs are consistently implemented, the agency should designate a coordinating office. This office would be responsible for inventorying, coordinating, marketing, and providing technical assistance and public education for all innovative programs, such as regulatory flexibility and environmental audits. Unless appropriate, this office would not administer these programs because most of the programs require technical expertise from the agency's permitting, inspection, enforcement, or legal staff.

In addition to the goals mentioned above, the Committee and coordinating office should help the agency integrate the concepts of regulatory innovation and incentive- and performance-based regulation into its operations, including program administration, strategic planning, and staff training. Innovation should not be confined to one office or one program, but should be a consideration in all of the agency's processes.

## Management Action

### 1.5 Encourage the use of environmental management systems and expand opportunities for public participation.

TNRCC should encourage regulated entities to develop environmental management systems as a measure of their commitment to compliance with environmental regulations and to natural resource conservation. Environmental management systems should play a key role in TNRCC's new regulatory structure. Entities in the upper tier of the structure should be required to have a management system while those in lower tiers could develop a management system to help them move to the next level. To accomplish this recommendation, TNRCC should expand its current environmental management system. program to all regions and advertise the benefits to regulated entities.
To improve accountability of TNRCC's environmental management system program, the agency should increase opportunities for public participation in the program. While many options exist to accomplish this goal, TNRCC should implement one that fits the needs of the agency as well as the regulated community and the public. Possible options are:

- providing the public with notice when an entity's environmental management system is at the point of being evaluated by TNRCC inspectors and allowing public comment on that system;
- requiring an entity to hold a public meeting to present its proposed environmental management system to those in attendance, answer questions, and address concerns; and
- requiring an entity to develop an outreach program for the community as part of its environmental management system.


## Impact

The intent of these recommendations is to create a regulatory structure within TNRCC that supports innovation, rewards performance, and is strategically directed while ensuring the accountability of regulated entities. While the agency currently uses the concepts of incentive-based and performancebased regulation, their use is haphazard. By creating regulatory tiers that correspond both to the environmental performance of entities and incentive-based programs offered by the agency, TNRCC's regulatory structure will be better coordinated and more accountable. Further, by expanding the use of environmental management systems as a tool in a more innovative regulatory structure, TNRCC may eventually be able to ensure ongoing compliance of regulated entities and refocus some of its inspection resources where they are needed most.

Other beneficial results of this recommendation are:

- making the agency more accountable to the public and the regulated community;
- making the regulated community more accountable to the agency and the public;
- enabling the agency to offer more incentives and greater flexibility within its innovative regulatory structure while maintaining the basic safeguards of its traditional regulatory structure;
- giving more incentives to regulated entities with poor compliance histories to improve their operations and stay in compliance with environmental regulations; and
- making regulated entities who are willing to exceed their permit requirements eligible for greater benefits than those entities simply performing at the required, minimum level.

While these recommendations will not solve the State's persistent environmental problems in the short-term, they are intended to allow TNRCC to take the necessary steps to address these problems in the future. The traditional regulatory structure has allowed Texas to substantially improve the quality of the environment. However, evidence suggests that this regulatory structure has its limitations and that to further conserve the State's natural resources, a different approach to environmental regulation is necessary. These recommendations should serve as the basis for this new approach.

Expanding the authority of the Waste Reduction Advisory Committee and creating a coordinating office would address the problem of having various innovative programs that operate independently, and would help the agency determine the best way to implement any new programs created by the Legislature. These recommendations would help TNRCC have a more systematic approach to how it uses incentives and would help regulated entities better understand their options. The Committee
would provide a natural forum for discussing and guiding the implementation of an innovative regulatory structure.

These recommendations are also intended to put TNRCC in a better position to take advantage of current and future opportunities for innovation offered by the federal government. Many of the limitations of the current regulatory structure cannot be solved at the state level, but must be addressed at the federal level. To the extent that Congress and EPA allow states more flexibility to experiment with ways to solve persistent environmental problems, TNRCC should be better able to take advantage of these federal initiatives by ensuring the accountability of its regulatory programs.

## Fiscal Implication

Requiring the agency to create an innovative regulatory structure should result in little fiscal impact. These recommendations would require the agency to use existing resources differently, and to adjust its strategic direction to include the proposed innovative regulatory structure.
TNRCC may need to hire new staff to implement the recommendation requiring the coordination of innovative regulatory programs. However, the agency could draw upon existing staff skilled in strategic planning, cross-agency coordination, and public outreach. A possible source of additional funding could be available if the Legislature provides the agency greater funding flexibility as outlined in Issue 10 of this report. In implementing innovative programs, the proposed office should seek advice from staff throughout the agency whose duties may be affected. For example, Waste Reduction Advisory Committee could suggest ways to accomplish the goals of this recommendation within its current structure and should not require additional staff support.
${ }^{1}$ More information about this study is available at http://www.tnrcc.state.tx.us/exec/bpr/index.html; INTERNET.
${ }^{2}$ Margaret A. Reams, Council of State Governments, "Incentive-Based vs. Command-and-Control Approaches to Improving Environmental Quality," Spectrum (Fall 1995), p. 7.
${ }^{3}$ Ibid., pp. 7-8.
${ }^{4}$ Texas Natural Resource Conservation Commission, Strategic Plan: State of the Texas Environment, Fiscal Years 1999-2003, Volume 1 (Austin, Tex., June 1998), p. 5.
5 Ibid., Volume 2, p. 1.
${ }^{6}$ Texas Natural Resource Conservation Commission and the Texas State Auditor's Office, Compliance and Enforcement Review (Austin, Tex., August 1998), p. 47.
T Texas Natural Resource Conservation Commission, Ensuring Compliance through Environmental Compliance Management Systems, (Austin, TX. July, 1998).
${ }^{8}$ Telephone interview with Mike Cowan, Executive Assistant, Office of Permitting, Texas Natural Resource Conservation Commission, May 11, 2000.
${ }^{9}$ Texas Natural Resource Conservation Commission, Biennial Report to the 77th Legislature: Protecting a Thriving Texas, Volume 1 (Austin, Tex., 1999), pp. 3-4, 6, and 8. The number of impaired water bodies was provided to Sunset staff by the Texas Natural Resource Conservation Commission on October 29, 1999.
${ }^{10}$ Reams, Spectrum, p. 6.
${ }^{11}$ For more information about these states' innovative regulatory programs see the following websites:

- Wisconsin's Environmental Cooperation Pilot Program and proposed Green Tier System at http://www.dnr.state.wi.us/org/caer/cea/ecpp/; INTERNET.
- Oregon's Green Permits Program at http://www.deq.state.org.us/od/p2/p2.htm; INTERNET.
- Georgia's Pollution Prevention Partners Program at http://www.ganet.org/dnr/p2ad/recog/p3.htm; INTERNET.
- New Jersey's Silver and Gold Track Program at http://www.state.nj. us/dep/opppc/; INTERNET.
${ }^{12}$ More information about Pennsylvania's Strategic Environmental Management policy, is availible at http://www.dep.state.pa.us/dep/deputate/ pollprev/Tech_Assistance/Zero_Emissions/SEM/semhp.htm; INTERNET.
${ }^{13}$ Florida Department of Environmental Protection, "A Review of State Environmental Leadership Programs" by Tellus Institute (April 18, 2000).
${ }^{14}$ More information about the environmental management systems multi-state working group is availible at http://www.dep.state.pa.us/dep/ deputate/pollprev/Tech_Assistance/mswg.htm; INTERNET.
${ }^{15}$ More information about EPA's regulatory reinvention initiative is availible at http://www.epa.gov/reinvent; INTERNET.
${ }^{16}$ Environmental Protection Agency, Aiming for Excellencè: Actions to Encourage Stewardship and Accelerate Environmental Progress, Report no. EPA100-R-99-006 (July 1999), p. 7.
${ }^{17}$ TNRCC's Pollution Prevention Integration website: http://www.tnrcc.state.tx.us/exec/oppr/p2int/p2int.html; INTERNET.


## Issue 2

## Compliance History Is Inconsistently Defined and Applied, Limiting Its Use as a Permitting and Enforcement Tool.

## Summary

## Key Recommendations

- Require the Commission to develop a common definition for compliance history.
- Require TNRCC to track and report the compliance history of all regulated entities.
- Require TNRCC to develop a performance assessment for regulated entities to determine eligibility for innovative programs, and to establish permit and enforcement guidelines.


## Key Findings

- The Legislature and TNRCC have recognized the importance of holding regulated entities accountable.
- The agency does not comprehensively assess the performance of regulated entities and ultimately its own performance.
- A better approach to compliance history would allow TNRCC to use innovative regulatory schemes currently employed by other states.


## Conclusion

Statutory provisions, rules, and policies vary when describing compliance history among agency functions and its air, water, and waste programs. What constitutes compliance history is not clearly defined and how it is used varies. The agency is less able to assess its job of protecting the environment without a comprehensive assessment of the regulated community's compliance performance. The agency is also less able to hold these entities accountable within existing permit and enforcement guidelines, and within new regulatory structures that provide incentives to exceed minimum regulatory expectations.

Providing a common definition of compliance history would enable the agency to track performance of regulated entities across all programs and agency functions for permitting, inspection, and enforcement. Using a performance assessment to determine eligibility for innovative programs would allow the agency to ensure greater accountability by regulated entities. Regulated entities would be encouraged and motivated to strive for high environmental performance to receive regulatory flexibility. Using compliance history information in deciding permitting and enforcement matters would provide consistency across media and predictability of results for the public and the regulated community.

## Support

Current Situation: The Legislature and TNRCC have recognized the importance of holding regulated entities accountable for how well they comply with the State's environmental requirements.

- The Legislature has instructed TNRCC to consider compliance history in deciding permitting and enforcement matters as a way to hold the regulated community accountable for environmental laws. Several statutes define what constitutes a compliance history and authorizes the agency to deny a permit based on the applicant's compliance history, although, to date, no permit has been denied for this reason. ${ }^{1}$ In the enforcement process, the statute directs the Commission to consider the history and extent of previous violations when determining the amount of an administrative penalty. ${ }^{2}$
- The agency has adopted rules requiring the submission of compliance history information in the permitting process, and guiding the use of this information in issuing or denying a permit. ${ }^{3}$ Other examples include air quality permit rules that define what compliance history should include and specify its use in determining if a request for a hearing on an air quality permit is reasonable. ${ }^{4}$ Agency rules also allow the consideration of compliance history of a transferee in the Commission's decision to approve a permit transfer. ${ }^{5}$
- Staff-level guidance specifies the consideration of compliance history information to guide much of the agency' inspection and enforcement activities. The staff uses this information in targeting its inspections and in determining if inspections will be announced or unannounced. It also considers compliance history in enforcement decisions as one of the factors in adjusting the level of administrative penalties for violations of state law or agency rules. ${ }^{6}$
- TNRCC currently is upgrading its enforcement database to better integrate the use of data in compliance and enforcement efforts, such as targeting inspections and developing enforcement cases. ${ }^{7}$
Problem: The lack of a consistent definition of compliance history affects the agency's ability to comprehensively assess the performance of regulated entities and ultimately its own performance.
- An entity's compliance history is generally intended to reveal how well it is meeting environmental laws and regulatory requirements over a specified period of time. The agency compiles this information through inspections, complaint investigations, and formal enforcement actions. Depending on the entity's performance, this information may include notices of violations, enforcement orders,
civil judgments, and even criminal convictions occurring up to the five previous years.
- The statutes, rules, and agency guidelines vary significantly in describing how to use compliance history in making decisions. This variation is apparent in the permitting function, where the authority to consider compliance history is fractured among many programs and does not allow for a comprehensive consideration of compliance issues across air, water, and waste programs. Ultimately, the agency is unable to see the bigger picture of how well the entities it regulates are doing in meeting the State's environmental requirements.
- While the agency maintains compliance history information for individual entities, it does not have a system for judging compliance collectively, and thus, cannot compare their performance. For example, TNRCC currently cannot centrally track information on repeat violators, nor can it determine the percentage of all violations committed by repeat violators. However, the agency did compile information on the number and percentage of enforcement orders issued to entities that have prior orders, as shown in the table, Enforcement Against Entities with Prior Orders, Fiscal Years 1997 - 2000. The increasing percentage of enforcement actions against entities with prior orders could suggest that the agency's enforcement actions are not successful

| Enforcement Against Entities with Prior Orders Fiscal Years 1997-2000 ${ }^{8}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Fiscal Year | Number of Entities with Prior Orders | Total Orders | Percentage |
| $1997{ }^{9}$ | 90 | 666 | 13.5\% |
| 1998 | 188 | 546 | 16.1\% |
| 1999 | 99 | 662 | 15.0\% |
| $\begin{gathered} 2000 \\ \text { (thru } 4 / 11 / 00 \text { ) } \end{gathered}$ | 76 | 438 | 17.4\% | in bringing violators into compliance. However, the agency cannot confirm, without extensive review, that the orders are for the same or similar violations.

- Without knowing how well regulated entities are performing, the Legislature and the agency have difficulty assessing the agency's job of protecting the environment. The agency relies on traditional data, using outputs such as the number of inspections conducted or enforcement orders issued, to assess its performance. However, these output measures provide limited insight as to how well the agency's activities protect the environment. An increase in enforcement activity may not mean greater environmental protection if more entities are out of compliance, just as a drop in enforcement may not mean less protection if the compliance rate has improved.

The agency has taken a first step in judging its performance by developing environmental indicators to assess the state of the environment in Texas. ${ }^{10}$ The indicators assess conditions, trends,
and interrelations between environmental factors to measure such things as changes in concentrations of pollutants or changes in health, or the ecological effects of pollutants. Data collected is used to link environmental assessment and planning with strategic planning. However, without the ability to assess compliance performance, TNRCC will be at a disadvantage in assessing why certain environmental conditions or trends exist.

## Opportunity: A better approach to using compliance history information would allow TNRCC to support innovative regulatory schemes currently employed by other states.

- Overall, the agency has not ventured outside the traditional regulatory approach, except for a few flexible regulatory programs. For TNRCC to move from this traditional approach to a more innovative regulatory approach that relies on incentives and flexibility to achieve greater environmental objectives, it must know how well regulated entities are performing to ensure accountability in the system. Entities with better compliance performance would be eligible for greater benefits and flexibility, while those with poorer compliance histories generally would not. Tracking this information would indicate to all regulated entities the regulatory consequences of not complying with environmental requirements.
- Other states have recognized the limitations of a traditional regulatory approach in providing incentives for greater environmental action based on compliance history information. States that have innovative regulatory structures hold regulated entities accountable by making their participation dependent on their compliance performance. The table, Innovative Regulatory Programs in Other States, provides examples. Often, regulated entities are rewarded for going beyond basic permit requirements by receiving greater regulatory flexibility which can reduce costs.

| Innovative Regulatory Programs in Other States |  |  |
| :--- | :--- | :--- |
| State Agency | Program | Description |
| New Jersey <br> Department of <br> Environmental <br> Protection | Silver and <br> Gold Track <br> Program |  |
| II | Offers different levels of regulatory flexibility and oversight for qualifying <br> entities based upon their environmental performance and ability. <br> Environmental <br> Prorticipation at a higher level offers greater flexibility. Open to regulated <br> entities with consistently acceptable compliance histories. |  |
| Oregon <br> Department of <br> Environmental Quality | Regulatory <br> Innovation <br> Pilot <br> Program | Allows regulated entities to use environmental management systems in lieu <br> of applicable state statutory requirements and regulations. Applicant must <br> be in good standing; specifically, not currently subect to enforcement <br> action, or failing to renew any permit or pay a fee or penalty. |

# Recommendation 

## Change in Statute

### 2.1 Require the Commission to develop a common definition for compliance history.

Through rulemaking, the Commission would develop a common definition for compliance history for all media - air, water, and waste - to be consistently applied in permitting and enforcement matters. This recommendation would require existing statutory provisions that guide TNRCC's use of compliance histories in permitting decisions to be examined, and if necessary, changed to allow a common definition to be applied. In making this definition, the Commission should consider, but not be limited to, including notices of violations and enforcement, state and federal enforcement orders, court judgments, and criminal convictions. The Commission would determine the time period for actions considered part of a compliance history and distinguish between significant and minor violations. The Commission would also need to specify that repeat violators are those with the same or similar violations within the time frame established. The Commission would also determine whether to include as part of the compliance history an entity's past performance in Texas, or to also include an entity's compliance record in other states for similar operations. The Commission would need to adopt their definition of compliance history by January 1,2001 in order to support the phased implementation of a tiered regulatory structure recommended in Issue 1.

### 2.2 Require TNRCC to track and report the compliance history of all regulated entities.

The agency would track and report compliance history data on all regulated entities to differentiate the compliance performance levels of regulated entities, and to allow adjustments in agency compliance and enforcement efforts. The agency would track the number of regulated entities in compliance, and in noncompliance, based on annual compliance inspections and whether violations are significant or minor, as defined by the Commission. The data collected would also include the number and percentage of all violations committed by repeat violators and the number and percentage of enforcement orders issued to entities that have prior orders. Finally, the agency would conduct a comparative analysis of the data on how well the agency and regulated entities are performing from one year to the next. The agency would report the compliance data and comparative analysis by region and media in its annual enforcement report.

### 2.3 Require TNRCC to develop a performance assessment for regulated entities to determine eligibility for innovative programs and to establish permit and enforcement guidelines.

The Commission would develop a performance assessment that differentiates regulated entities based on compliance performance. The agency would use this assessment, in conjunction with the new regulatory structure discussed in Issue 1 , to determine eligibility for participation in agency programs and services such as supplemental environmental projects, regulatory flexibility, flexible permits, or other incentive-based programs. This recommendation would not change the statutory direction on the use of compliance history in the environmental audit program. The Commission should determine
how to assess the performance of regulated entities that are not routinely inspected for compliance. For instance, the Commission could require an entity to undergo a compliance inspection to determine eligibility for participation in programs or initiatives that require a higher degree of compliance.
The Commission would also determine how compliance history should be used in its existing permitting and enforcement matters by developing guidelines. The Commission should use the information about the performance of regulated entities to guide its decisions to issue or deny permits and to guide the enforcement action taken against violators.

## Impact

The intent of these recommendations is to provide for a consistent multi-media definition of compliance history to be applied across all media and agency functions. This consistency would provide a standard approach for judging how well regulated entities are meeting existing regulatory requirements and also the impact of the agency's own actions on the environment.
Using compliance histories to develop a performance assessment would increase the level of accountability within TNRCC's regulatory structure. As a result, the agency would be able to ensure a higher level of performance from regulated entities that want to gain greater regulatory flexibility. With greater assurances of accountability, the agency would be able to more easily make the transition to an innovative regulatory structure. The performance assessment would allow the agency to take into account the differences in compliance histories of regulated entities, to know the reasons for compliance and noncompliance, and to take into account the regulated community's abilities for responsible environmental management. These factors determine how regulated entities would qualify for regulatory flexibility and other benefits.

Tracking compliance history information would increase the agency's ability to determine and analyze the performance of regulated entities and itself. Better information on performance would allow more efficient use of limited resources. The information would also allow the Legislature to better assess the agency's performance. The analysis of the data from year to year would determine if adjustments need to be made in compliance and enforcement activities.

Another benefit of a consistent definition is removing unnecessary debate as to what constitutes a compliance history in contested cases. This should decrease the time and resources spent determining what evidence can be submitted in contested case hearings.

## Fiscal Implication

The recommendations will have no significant fiscal implication to the State. The reporting requirements cost would be minimal and would be part of the agency's existing annual reporting efforts. In addition, costs associated with tracking compliance histories could be included in the agency's current revision of the compliance and enforcement database.

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## Issue 3

## Participation in TNRCC's Innovative Regulatory Programs Is Not Performance-Based and Lacks Sufficient Accountability.

## Summary

## Key Recommendations

- Require TNRCC to apply a higher compliance standard for participation in its innovative regulatory programs.
- Require entities to show a clear environmental benefit to participate in the agency's regulatory flexibility and Supplemental Environmental Project programs.
- Expand marketing, public education, and technical assistance for innovative regulatory programs.
- Expand opportunities for public participation within innovative programs.


## Key Findings

- TNRCC offers regulated entities innovative programs within its predominantly traditional regulatory structure.
- TNRCC does not adequately hold participants in innovative regulatory programs accountable for their compliance performance.
- Despite legislative interest in creating innovative regulatory programs, these programs are not having their intended impact.


## Conclusion

While TNRCC offers regulated entities several innovative regulatory programs, they lack sufficient accountability and impact. Eligibility requirements for the programs are inconsistent and lenient, allowing all but those with the worst compliance histories to participate. Further, few regulated entities participate because the programs are complex, and the public mistrusts them because the agency has not implemented proper controls.
The Sunset review identified several recommendations to ensure that innovative regulatory programs are accountable. By holding participants to a higher standard of environmental performance, TNRCC and the public will have more assurance that regulated entities are not gaining unjustified benefits. Greater marketing, public education, and technical assistance efforts will increase understanding of the programs and result in higher levels of participation. The public would also be more trusting of these programs if public participation were expanded.

## Support

Current Situation: TNRCC offers regulated entities innovative programs within its predominantly traditional regulatory structure.

- TNRCC offers the regulated community innovative programs that are both non-regulatory and regulatory. The basic distinction between the two is their relationship to the agency's regulatory processes of permitting and enforcement.
- The innovative programs that are independent of the permitting and enforcement processes include compliance assistance for small businesses and local governments, pollution prevention and recycling initiatives, and air emission credits that can be traded among entities. These programs have few eligibility requirements because they are intended to increase voluntary compliance with environmental regulations and reduce pollution through outreach, education, and market-based incentives.

Existing innovative programs include regulatory flexibility, supplemental environmental projects, environmental audits, and flexible permits.

- TNRCC has several innovative programs that offer an alternative to the traditional regulatory structure. Four of the most notable programs are regulatory flexibility, supplemental environmental projects, environmental audits, and flexible permits. These programs offer participants incentives such as flexibility within existing permit rules and laws, ability to use penalty dollars for beneficial environmental projects, and immunity from penalties for voluntary disclosure of violations. The table, Innovative Regulatory Programs at TNRCC, provides more specific information about each program.

Problem: TNRCC does not adequately hold participants in innovative regulatory programs accountable for their compliance performance.

- Each program has its own standard for judging an applicant's eligibility according to its compliance history. The table, Compliance History Requirements for Participation in Innovative Regulatory Programs, indicates what these requirements are and where they are located.

While all of the programs are created in statute, their compliance history requirements may be found elsewhere, typically in staff-level guidance documents. Further, the eligibility requirements that do exist are often lenient, allowing most entities, except those with the worst performance, to participate. In the case of the environmental audit program, the agency successfully uses the statutory eligibility criteria as a basis to deny immunity to entities with chronic compliance problems.

| Innovative Regulatory Programs at TNRCC |  |  |  |
| :---: | :---: | :---: | :---: |
| Program | Year Created | Description of Program | Participants, as of March 2000 |
| Regulatory <br> Flexibility | 1997 | TNRCC may issue a Regulatory Flexibility Order for an exemption from a state statute or rule regarding pollution control or abatement. The alternative must be as protective of the environment and public health and cannot be inconsistent with federal law. Exemptions from federal rule or law cannot be granted. | Six entities have applied, of these two have received orders; two are in review; one was withdrawn; and one was determined inappropriate. |
| Supplemental Environmental Projects (SEPs) | 1993 | A SEP is a means to direct penalties for violations toward environmentally beneficial projects instead of being paid to the General Revenue Fund. These projects can be performed by the violating entity or through a third-party agreement with a non-profit organization or local government. | 235 projects have been performed by 220 entities. |
| Environmental Audit | 1995 | The Environmental Audit program allows a regulated entity to inspect its facilities for compliance with environmental laws. If the entity provides prior notice of its intent to conduct an audit, it may receive immunity from civil and administrative penalties for violations discovered as a result of the audit, disclosed to TNRCC, and resolved in a timely manner. | 1,151 notices of audit and 310 disclosures of violations have been filed. These notices of audit were filed by approximately 280 entities. ${ }^{1}$ |
| Flexible Permits | 1995 | A flexible permit allows a facility to make changes or increase production without a permit amendment as long as the emissions for the facility do not exceed a set cap. Flexible permits are only available for air emissions. | 39 flexible permits have been issued to 26 entities. |

- These programs are intended to serve as incentives for regulated entities to voluntarily comply with the law or to develop innovative solutions to environmental problems. However, since the eligibility criteria are lenient, regulated entities can gain the benefits of participation without having to demonstrate or improve their

| Program | Location of Requirements |  |  | General Description of Requirements |
| :---: | :---: | :---: | :---: | :---: |
|  | Law | Rule | Policy/Other |  |
| Regulatory <br> Flexibility |  | $\checkmark$ | $\checkmark$ | Participant should demonstrate willingness to comply with environmental requirements. Entities are excluded if they have incurred a judgment from the Texas or U.S. Attorney General or have been convicted of willfully or knowingly committing an environmental crime. These restrictions apply for three years from date of judgment or conviction. |
| Supplemental <br> Environmental <br> Projects <br> (SEPs) |  |  | $\checkmark$ | Participant must report all environmental orders and the compliance status of each. Repeat offenders and entities who are out of compliance with previous agency orders are less appropriate for the program. |
| Environmental Audit | $\checkmark$ |  |  | An entity may not receive immunity if a court or administrative law judge finds that it has repeatedly or continuously committed significant violations within the past three years, and has not attempted to bring itself into compliance. |
| Flexible <br> Permits |  | $\checkmark$ | \% | The standard compliance history review for all permits applies to flexible permits. Flexible permits have no special compliance history requirements. |

performance. As a result, these programs fail to encourage entities to change their behavior or do more than the minimum requirements of their permits.

- The public is skeptical of these programs and sees them as easily abused and as ways for regulated entities to avoid complying with the law. For example, the regulatory flexibility program can be construed as allowing entities to waive environmental regulations for their own purposes and without benefit to the environment. Further, public interest groups see the environmental audit program as a way for entities to avoid punishment and withhold important information about violations from the public. ${ }^{2}$ This skepticism is enhanced by the fact that only minimal public input is sought for the programs and that TNRCC has done little to help the public understand the laws governing the programs.
Problem: Despite legislative interest in creating innovative regulatory programs, these programs are not having their intended impact.
- Participation in these four programs is limited when compared to the number of entities regulated by TNRCC. Many entities are unaware of the programs, believe the benefits are not worth the time
and effort needed, or see the requirements as too complicated, especially for small businesses and local governments. ${ }^{3}$ As a result, only entities with legal and environmental staffs tend to know about the programs and their requirements.
- The programs have complex requirements and TNRCC has not been successful in educating the regulated community or the general public about them. Other than the statutes establishing the programs, the only available written information on environmental audits, regulatory flexibility, and flexible permits are regulatory guidance documents published by the agency. These documents explain, in technical language, how to participate in the programs. Further, to benefit from these documents, someone would have to know what they are looking for in the agency's publications catalog or on the agency's website. As a result, these documents do not help those with a limited understanding of environmental regulations.
The agency has taken steps to improve outreach in some of these programs. Specifically, staff makes presentations to the regulated community about the environmental audit program and actively markets the SEP program through its website and letters to entities involved in enforcement actions.
- The agency's implementation of the environmental audit program adds to its complexity. For example, the program is administered by technical staff within the Office of Compliance and Enforcement. As a result, the program is not user-friendly. Rather than providing assistance to entities so they can successfully participate, agency staff has focused its efforts on corresponding with entities, through highly technical letters, when they do not meet the program's requirements. While necessary to ensure prompt administration of the program, this approach can intimidate participants.

Agency staff often sets precedents on what it will and will not accept from participants. These precedents are not available to participants so that they can correct their actions in the future. For example, the regulatory guidance document states that a disclosure of a violation found during an audit must be reported to TNRCC "promptly upon discovery."4 To implement this guidance, agency staff will not grant immunity to entities who disclose violations more than six months after an audit is suppose to end. Participants in the program may not know this policy and may disclose a violation too late to receive immunity. Also, the agency does not clearly communicate how it uses an entity's compliance history to deny immunity.

- Some of the projects undertaken by program participants have had little real benefit to the environment. For example, of the regulatory flexibility applications received, only one would have a beneficial

TNRCC has not actively promoted these innovative regulatory programs.

> SEPs need greater accountability to ensure that they achieve intended environmental benefits.

## SEPs Related to a Participant's Business

- A company had provided, free of charge, waste incineration services to a local government-sponsored household hazardous waste collection day. However, when it became involved in an enforcement action, the company offered this service as part of a SEP to "cost justify" its continued involvement.
- A company that collects and processes used cooking oil for profit offered to dispose of oil from lowincome schools in the community. TNRCC staff, however, recognized the potential profit from the SEP and factored it into the amount the company had to pay for the project.
environmental impact. The other applications mainly help the entities do their business more efficiently. The text box, Requested Regulatory Flexibility Exemptions, lists the exemptions from state rules or laws that the four applicants requested.
Several supplement environmental projects have also had questionable benefit to the environment. However, the Executive Director's policy governing the program condones these projects by stating that an entity may perform a SEP


## Requested Regulatory Flexibility Exemptions

- Use a different method for calculating vapor pressure.
Ship waste to a Kentucky facility for use as fuel rather than disposing of it by deepwell injection or incineration in Texas.
- Use an electronic bill-of-lading system rather than manifests for waste hauling.
Use existing monitoring measures rather than install new monitors.
that has a direct
benefit to itself as long as the cost of the project is at least three times higher than the amount of the penalty to be offset. ${ }^{5}$

For example, in 1999 the Commission approved a project allowing a company that had violated air emission regulations to spend 16 times more than the amount of its offset penalty to construct drainage improvement and runoff containment systems on its property. ${ }^{6}$ Although this company had to spend many times what it would have paid in penalties, its use of this money to improve its own facility minimized the deterrent effect of the original penalty.

- No controls exist to ensure that SEP money is properly spent for the benefit of the environment. For example, the Executive Director's policy states that a SEP should demonstrate an "appropriate relationship between the nature of the violation and the environmental benefits to be derived from the project.."7 However, in the example described above, the company had violated air emission regulations, but its SEP involved drainage improvements. In reviewing the agency's files, Sunset staff also found examples of participants whose SEPs were directly related to their businesses, such as those described in the text box, SEPs Related to a Participant's Business.

In a 1998 audit of TNRCC's SEP program, the Internal Auditor, in conjunction with the State Auditor's Office, recommended that regional offices monitor SEP progress and conduct a final evaluation of each completed project. The auditors strongly advised that TNRCC have a more powerful accountability mechanism to verify that intended environmental benefits are
achieved. ${ }^{8}$ The auditors also cautioned that without physical verification that a project was completed according to specifications, the agency cannot ensure the accomplishment of desired outcomes. ${ }^{9}$ In response to this recommendation, the Field Operations Division stated that the regional offices will conduct reviews in high profile cases, but that they do not have the resources to monitor the progress of all projects. ${ }^{10}$

## Recommendation

## Change in Statute

### 3.1 Require TNRCC to use compliance performance when determining eligibility for participation in its innovative regulatory programs.

This recommendation would require the Commission to apply the following performance standards.

- Require entities participating in the regulatory flexibility program to demonstrate the highest level of environmental compliance performance to be eligible.
- Prohibit participation in the SEP program by entities with the poorest level of environmental compliance performance.
- Require entities participating in the flexible permit program to have a better-than-average environmental compliance performance, compared to those entities who receive a standard permit.

This recommendation would provide specific statutory guidance for eligibility in the agency's innovative regulatory programs, those programs that depart from the agency's current permitting, inspection, or enforcement practices. The recommendation would require the agency to consider an entity's compliance performance for participation in innovative programs under a framework provided in Issues 1 and 2 of this report. Entities would then have an incentive to implement innovative projects that exceed basic expectations currently established through permitting and enforcement requirements. At the same time, they would remain accountable to meeting the basic environmental protection goals that traditional regulatory requirements impose.

### 3.2 Require entities to show a clear environmental benefit to participate in the agency's regulatory flexibility and SEP programs.

Specifically, this recommendation would require projects performed as part of regulatory flexibility orders to have a clear environmental benefit. This recommendation would not preclude participants in the regulatory flexibility program from benefitting directly from their participation, but would require documentable benefits to the quality of the environment before the project could be approved.
This recommendation would also require supplemental environmental projects to have a clear environmental benefit and a direct correlation to the violation. TNRCC would be prohibited from approving SEPs that it considers to have indirect environmental benefits or which solely benefit the participant. Also, environmental benefits derived from a project must have an appropriate relationship to the nature of the violation.

## Management Action

### 3.3 Expand marketing, public education, and technical assistance for TNRCC's innovative regulatory programs.

TNRCC should use available resources, such as its website, publications, and trade fairs, to market innovative programs, provide technical assistance to regulated entities, and educate the public on their use. These efforts should focus on the performance level needed to participate and the accountability measures within the programs. Publications regarding these programs should be geared toward the general public, as well as regulated entities, using plain language to describe their requirements. This recommendation should be implemented in conjunction with Issue 1 of this report to create a coordinating office to oversee the development of a regulatory structure that better supports innovative environmental regulation.

### 3.4 Improve accountability and controls for supplemental environmental projects and publish staff precedents and interpretations for innovative regulatory programs.

This recommendation encourages SEP participants to use third-party agreements as often as possible. The agency has already developed a number of these agreements which allow SEP participants to give their SEP money to a third party, such as the Nature Conservancy or a local government-sponsored environmental project, rather than developing their own projects. In addition, TNRCC should develop a third-party agreement with the Texas Parks and Wildlife Department or other state agencies with responsibilities to protect the environment. These agreements should always be governed by contracts approved ahead of time by the Commission, as is current practice. TNRCC should also improve controls in the SEP program by conducting site visits whenever possible to verify completion and benefit of projects.

TNRCC would inform the regulated community and the public regularly regarding any precedent or interpretations set by staff for the implementation or administration of innovative regulatory programs. For example, staff should publish a notice through its website or an appropriate newsletter of its decisions, such as only allowing immunity to entities that disclose a violation through the environmental audit program within six months of the end of an audit. The agency should also use these forums to clarify how an entity may be denied immunity based on poor compliance history.

### 3.5 Expand opportunities for public participation within innovative regulatory programs.

This recommendation would encourage TNRCC to find more ways for the public to participate in its innovative regulatory programs. Since these programs offer an alternative to traditional regulatory processes, greater public participation is a key to ensuring accountability. Although this recommendation is not intended to prescribe exactly how TNRCC should increase participation, several options for accomplishing this goal are available. For example, to receive a waiver from environmental regulations, some states require applicants to hold meetings with interested parties to explain their innovative approaches and to answer questions. Other states require regulated entities to develop lists of interested parties as part of their applications for innovative programs. An entity then must involve these parties in its application process.

## Impact

These recommendations would require the agency to use a regulated entity's compliance performance in assessing eligibility for participation in non-traditional regulatory programs. Improving accountability within TNRCC's innovative regulatory programs by making participation performance-based would benefit the regulated community, the agency, and the public. Improved accountability is important because regulated entities should not receive benefits from the agency without first demonstrating the ability to comply with environmental laws.

These recommendations are also intended to improve participation in TNRCC's innovative regulatory programs through expanded marketing and technical assistance. Requiring greater accountability to participate in these programs is not intended to reduce the number of regulated entities who choose to participate. As discussed above, regulated entities currently do not participate because the requirements are too complicated or they do not know about the programs. By increasing TNRCC's marketing and technical assistance efforts, participation should increase. Also, by incorporating these programs into TNRCC's new innovative regulatory structure, as recommended in Issue l, they should play a more integral role in the agency's efforts to further streamline regulatory requirements for entities that exceed minimal expectations.
Expanding opportunities for public participation in TNRCC's innovative regulatory programs would reduce the amount of skepticism and would improve accountability both in terms of how the agency administers the programs and what projects regulated entities undertake. Greater public participation would ensure that projects performed under these programs are beneficial to the environment as well as the participant.

## Fiscal Implication

Requiring the agency to improve the accountability of its innovative regulatory programs should result in little or no fiscal impact to the State. To implement these recommendations, TNRCC should draw upon its existing resources. The expansion of marketing, technical assistance, and public education is a management recommendation, and therefore the agency has discretion in how to implement the recommendation. While TNRCC should be able to use its existing outreach resources, it may choose to do more and thus would need additional appropriations. However, the long-term effect of this recommendation should be to attract more participants and increase public awareness of the agency's innovative regulatory programs.

Conducting site visits in the SEP program is also a management recommendation, allowing the agency to implement it to the extent it deems necessary given existing and future resources. The agency could perform these visits in conjunction with its enforcement follow-up inspections.
${ }^{1}$ This number is an estimate based on a manual count of entities in the Texas Natural Resource Conservation Commission Notice of Audit database.
${ }^{2}$ Sunset staff analysis of public interest group responses received during the Sunset review of the Texas Natural Resource Conservation Commission.
${ }^{3}$ Sunset staff interviews with Texas Natural Resource Conservation Commission staff and industry representatives, February and March 2000.
4 Texas Natural Resource Conservation Commission, The Texas Environmental, Health, and,Safety Audit Privilege Act, Regulatory Guidance Document no. RG-173 (Revised) (September 1997), p. 5. Available at http://www.trrcc.state.tx.us/legal/envaudit.htm; INTERNET.
5 Texas Natural Resource Conservation Commission, "Environmental Enforcement Policy Statement," (October 26, 1995). Available at http:// www.tnrcc.state.tx.us/legal/sep/seppolicy.htm; INTERNET.
${ }^{6}$ Sunset staff analysis of Texas Natural Resource Conservation Commission Supplemental Environmental Project files, March 2000.
' Texas Natural Resource Conservation Commission, "Environmental Enforcement Policy Statement."
8 Texas Natural Resource Conservation Commission, Office of Internal Audit, "Audit Recommendation Status Report: Internal Audit Report \#MA 98-15, Compliance and Enforcement Review" (Internal document sent to Sunset staff by Carolyn Maclay Beyer, Internal Auditor, March 1, 2000), p. 13.
${ }^{9}$ Ibid.
${ }^{10} \mathrm{Ibid}, \mathrm{p} .12$.

## Issue 4

## Agency Policies on Upsets and Inspections Are Not Based on the Performance of a Regulated Entity.

## Summary

## Key Recommendations

- Require regulated entities to demonstrate a good compliance history before they may receive an announced inspection.
- Require TNRCC to track whether inspections are announced or unannounced, and track and report the occurrences of all upset emissions.
- Limit exemptions from possible enforcement for entities with chronic numbers of upsets.


## Key Findings

- Agency policies and rules, which continue to be refined, define how it will conduct inspections and approach unplanned air emissions.
- A lack of information or analysis regarding inspections and upsets hurts the agency's ability to make cost effective decisions about inspections, or to ensure compliance with permit requirements.


## Conclusion

The agency has defined approaches to field inspections through division level policy, and rules for unauthorized air emissions resulting from upsets. TNRCC does not track whether inspections are announced or unannounced, limiting the agency's ability to assess the impact of its policy of conducting announced inspections, or whether it complies with its own policy of conducting unannounced inspections for repeat offenders. Also, an evaluation of companies with chronic upsets found many never receive an inspection while others may be able to avoid permit limitations on air emissions.
The Sunset review identified recommendations that would hold regulated entities accountable for their compliance performance. In the case of inspections, entities would have to demonstrate a good compliance history to continue receiving announced annual compliance inspections. Tracking inspections, by announced versus unannounced, would allow the agency to see whether compliance performance guides the type of inspection performed. When a company has a high number of upsets, it would lose the opportunity to receive an exemption from emission limits, and be subject to automatic inspection and possible enforcement.

## Support

Current Situation: Agency policies and rules define how it will conduct inspections and approach unplanned air emissions.

- Agency policies affect the behavior of regulated entities to comply with permit requirements, and govern circumstances in which they may exceed permitted limitations. Through inspections, the agency seeks to ensure compliance, while its policy on air releases, known as upsets, allow these entities to exceed emission limitations established by permit. The text box, Upset Terms, provides definitions used in the discussion of unplanned air emissions. ${ }^{1}$
- The Legislature has not provided statutory guidance to the agency on inspections, nor


## Upset Terms

Upset - Unplanned occurrence in a process or operation that results in unauthorized emissions of air contaminants. Upsets are reported to TNRCC when emissions of air contaminants are equal to or in excess of reportable quantities.
Maintenance Event - Planned events expected to cause air emissions that exceed permit limitations. These events must still be reported to TNRCC, but are not treated as upsets.
Reportable quantity - Quantity of emissions in an upset or maintenance event that exceeds limits in permits, determining when an owner or operator of a facility must report to TNRCC. has Commission rule defined the agency's inspection policy. Rather, the policy has been developed at the division level to require up to two weeks' notice before a routine compliance inspection. This policy is intended to increase the efficiency of the inspection process by ensuring that appropriate personnel and records are available during the inspection. However, advance notice is not provided in certain situations as shown in the text box, Uses of Unannounced Inspections. ${ }^{2}$ By providing a candid snapshot of a facility's normal operations, unannounced inspections encourage continuous compliance with permit requirements.

Since 1996, agency staff have clarified the inspection policy to bring greater consistency to all air, water, and waste

Uses of Unannounced Inspections

- Suspicion that a facility is intentionally violating laws or regulations or is a repeat offender.
- Follow-up inspection of an enforcement action.
- Complaint investigation.
- Inspection of a petroleum storage tank.
- Inspection of used car lots for pollution control equipment.
- Special projects as predetermined.
programs and regions. In the past, some regions conducted unannounced inspections while others would provide notification.
- Agency rules allow any company, regardless of compliance history, that has experienced an upset or maintenance event, to be exempt from enforcement action for exceeding permit emission limits if it meets certain reporting and recordkeeping requirements. The facility must notify the agency no later than 24 hours after the discovery of an upset and demonstrate that it was not reasonably avoidable. ${ }^{3}$ For maintenance events, the facility must notify the agency at least ten days, or as soon as practicable, before the event, and must demonstrate that actions were taken to minimize the emissions. ${ }^{4}$

The facility is required to keep records on both upset and maintenance events, identifying the cause or reason for the event, processes and equipment involved, date and time of upset, duration, actions taken to correct unplanned events and minimize emissions, and the type and quantity of the compound released. The policy currently requires records to be maintained at the facility.

- The total number of upset and maintenance events for fiscal years 1998 and 1999 were 7,820 and 8,347 respectively. Of the total upset and maintenance events that occurred, 75 percent in fiscal year 1998, and 68 percent in fiscal year 1999 were unplanned. ${ }^{5}$ The table, Upset/Maintenance Data, Fiscal Years 1998-1999, summarizes

Entities experiencing an upset are generally exempt from enforcement action for exceeding permit emission limits.

| Upset/Maintenance Data Fiscal Years 1998-1999 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Total Upsets/ Maintenance Events |  | Number of Upsets |  | Upsets as Percent of Total |  |
|  | 1998 | 1999 | 1998 | 1999 | 1998 | 1999 |
| 1-Amarillo | 409 | 476 | 269 | 342 | 65.8\% | 71.8\% |
| 2 - Lubbock | 716 | 955 | 455 | 680 | 63.5\% | 71.2\% |
| 5 - Tyler | 538 | 716 | 280 | 419 | 52.0\% | 58.5\% |
| 7 - Midland | 1,314 | 1,738 | 855 | 1,367 | 65.0\% | 78.7\% |
| 9 - Waco | 253 | 284 | 217 | 202 | 85.8\% | 71.1\% |
| $10 \cdot$ Beaumont | 1,634 | 1,191 | 1,268 | 936 | 77.6\% | 78.7\% |
| 12 - Houston | 1,696 | 1,515 | 1,527 | 1,189 | 90.0\% | 78.5\% |
| 13-San Antonio | 318 | 203 | 251 | 163 | 78.9\% | 80.3\% |
| 14 - Corpus Christi | 437 | 885 | 437 | 677 | 100\% | 76.5\% |

TNRCC does not track inspections of repeat violators or whether inspections are announced or unannounced.
upset and maintenance event data for the nine TNRCC regions that had 200 or more events in either 1998 or $1999 .{ }^{6}$ The table provides the number and percentage of unplanned upsets out of the total number of upset and maintenance events.

Current Situation: The agency continues to improve its use of inspections and refine its upset policy.

- The agency is currently integrating its existing 30 databases for compliance and enforcement data to improve its use of field inspections to ensure compliance. The new database will enhance the exchange of compliance information between Austin and regional offices, and will be used to target inspections to have the most impact. The new database will reduce the time spent accessing and obtaining information from the many databases and redirect those resources to meet inspection output measures. ${ }^{7}$
- Agency rules on upset and maintenance events have been modified several times since they were adopted in 1972. The agency's rules have become more prescriptive over time, especially recordkeeping and reporting requirements. For example, recently proposed changes would require records of unauthorized emissions at or above the reportable quantity to be submitted to the agency within two weeks of the event, and allow local air pollution programs or EPA to review records maintained at the facility. ${ }^{8}$

In response to a rules revision in 1997, agency staff have recently begun to pilot a new response plan in the three Gulf Coast regional offices to enhance the scrutiny of upset and maintenance events. The plan includes strategies for better coordination among TNRCC divisions, formation of Upset/Maintenance Teams in regional and central offices, procedures for reviewing upset and maintenance notifications and reports, and enhanced inspection, surveillance, and enforcement activities. ${ }^{9}$

Problem: A lack of information or analysis regarding inspections and upsets impairs the agency's ability to make cost effective decisions about inspections, or to ensure compliance with permit requirements.

- Whether TNRCC is properly targeting its inspections is difficult to determine because the agency does not track inspections conducted on repeat offenders, or whether inspections are announced or unannounced. ${ }^{10}$ TNRCC tracks inspections only by type, such as an annual compliance inspection or complaint investigation. As a result, the agency cannot determine if it is spending more time on entities with good compliance histories rather than focusing its limited resources on repeat offenders. Not tracking whether inspections are
announced or unannounced prevents the agency from assessing the impact of its policy of conducting announced inspections.

According to the agency's inspection policy, no notice of inspection is to be given before an enforcement follow-up or if the entity is a repeat offender. Sunset examined whether this policy is consistently applied in several regional offices, and found instances in which repeat offenders received an announced enforcement follow-up inspection. ${ }^{11,12}$ In all, 47 repeat offenders were reviewed with 40 percent having received some notification of an inspection. The following information summarizes the results of the review:

- Seven received announced enforcement follow-up inspections;
- Two received announced follow-ups due to involvement of Attorney General staff in the inspection;
- Ten received announced enforcement follow-up inspections that were conducted as part of an annual compliance inspection; and,
- Twenty-eight received an unannounced inspection. ${ }^{13}$

The agency asserts that inspections, whether they are announced or unannounced have little effect on compliance. However, because TNRCC does not track if inspections are announced or unannounced, it has no way to knowing if unannounced inspections enhance compliance by regulated entities.

- Agency rules do not limit the number of unplanned upsets that a company may have before the agency would consider taking an enforcement action. A review of companies with chronic numbers of unplanned upsets during fiscal years 1998 and 1999 is summarized in the table, Chronic Upsets, Fiscal Years 1998-1999. ${ }^{14}$

| Chronic Upsets |  |  |
| :---: | :---: | :---: |
| Fiscal Years 1998-1999 |  |  |
| Company | Number of Upsets |  |
|  | 1998 | 1999 |
| A | 359 | 75 |
| B | 161 | 249 |
| C | 102 | 63 |
| D | 177 | 313 |

The frequency of unplanned upset events occurring at these companies raises concerns that the upsets may be part of normal operating procedures that may warrant investigation. While some companies with high numbers received inspections, such as companies C and D , the others did not receive an inspection for either of the two years reviewed. Specifically, Company A did not receive an inspection despite having 434 unplanned upsets in a two-year period.
Of even greater concern than regulated entities operating in a manner not authorized by their permits, is the potential environmental or health impact these unplanned upset events may have. For example, in 1998, the total tons of air pollutants emitted as a result of unplanned upsets for the state's 2,200 major sources was approximately 120,000 tons, or 4.2 percent of the total amount of emissions authorized by permit. ${ }^{15}$ Among the pollutants emitted were known carcinogens
like benzene; and ozone-causing compounds such as nitrogen oxide and volatile organic compounds. In one specific instance in 1998, a facility released approximately 20,000 tons of butane and isobutane into the air. ${ }^{16}$ These compounds are known to contribute to groundlevel ozone.

- A key component of tracking and responding to unplanned upset events is knowing when these events generally occur. Specifically, the agency could develop a greater understanding of upsets whether they are random events or part of a facility's standard operating practices - by reviewing the date and time the events occur. However, the agency does not centrally track the time when unplanined upset events occur, despite having information that would support such an analysis. While the agency can determine those events that occurred on a weekend, it does not routinely do so.


## Recommendation

## Change in Statute

### 4.1 Require regulated entities to demonstrate a good compliance history before receiving announced inspections.

### 4.2 Require the agency to track whether inspections are announced or unannounced.

These recommendations would require the agency to offer announced annual compliance inspections as privileges to be earned based on an entity's compliance performance. The agency would use an entity's performance assessment, as discussed in Issue 2, to determine eligibility for announced inspections. The recommendation would not change existing agency policy concerning the use of unannounced inspections for repeat violators, enforcement follow-ups, or in cases where the agency determines a facility is willfully violating the law. The agency would be required to track the use of announced and unannounced inspections to ensure that inspections are conducted according to an entity's compliance performance, and according to the agency's own policy.

### 4.3 Require the agency to track and report the occurrences of all upset emissions.

This recommendation would require the agency to centrally track all maintenance and unplanned upset events. The information tracked should include the facility reporting the event, number of upsets by region, the type and estimated amount of pollutants emitted, the date and time the event occurred, the reason for the upset, the duration of the event, and any exemptions, inspections, or enforcement actions taken in response to the event. The agency should provide an assessment of this information in its statutorily required annual enforcement report.

### 4.4 Limit exemptions from possible enforcement for entities with chronic numbers of upsets.

This recommendation would require the agency to evaluate regulated entities with high numbers of unplanned upsets, and set a limit on the number of upsets that can occur before the agency can consider taking an enforcement action. The Commission, through rules, would set the allowable number of upsets that can occur each year and establish exceptions for events that occurred for documentable safety reasons. In adopting its rules, the Commission should consider, but not be limited to, the frequency of the upset, the exact source of the upset at a facility, and the magnitude of the upset. An entity that exceeds the limit would no longer be exempt from emission limits and could be subject to enforcement.

## Management Action

### 4.5 Companies with high numbers of upsets should automatically receive inspections.

A company should receive an automatic inspection by the agency if it has a history of chronic upsets. The agency should determine the number of events that may occur before a company receives an inspection. Part of the inspection should include evaluating the corrective means the facility has taken to reduce the number of unplanned upsets as a way to assess why efforts have not been successful.

## Impact

The intent of these recommendations is to hold regulated entities accountable for their compliance performance. The use of compliance history in the inspection and upset policies would provide additional incentives for regulated entities to remain in compliance with their permit requirements. Entities with poor compliance histories would no longer have the privilege of being notified of upcoming inspections or being exempt from enforcement for the unplanned release of pollutants into the state's air.
The recommendation on announced inspections would encourage regulated entities to remain in continuous compliance. Regulated entities would want the flexibility that comes with an announced inspection such as being able to prepare records for review and to have proper personnel available during the inspection. Tracking announced and unannounced inspections would allow the agency to determine if inspections are being conducted based on a regulated entity's compliance performance.
The recommendation on upsets would encourage companies with high numbers of unplanned upsets to evaluate ways to decrease the frequency and magnitude of these events. Failure to do so would open the facility to possible agency enforcement action. Tracking information on upsets would allow the agency to better assess why upsets occur, and how to reduce their frequency and impact. Lastly, if the agency automatically inspects facilities that exceed the established limit on the number of allowable upsets, regulated facilities would have an additional incentive to assess their operating practices to ensure the facility is operating properly.

## Fiscal Implication

The recommendations would have a fiscal impact to the State: Specifically, the use of unannounced inspections for entities with a poor compliance history may require the agency to conduct more actual site visits to ensure the inspection was satisfactorily completed. Any loss in efficiency could be compensated for by reducing the total number of inspections, or to maintain the same number of inspections, by adding resources. Additionally, the management recommendation to automatically inspect entities with a high number of upset events would also require additional resources. The actual additional costs of this recommendation would depend on how the Commission's defines compliance history and its implementation, and could not be estimated for this report.
The recommendations to track inspections and upsets would not have a cost to the State. The agency would be able to track inspections by type through the new compliance and enforcement database currently under development. Any costs associated with tracking information concerning upset air emissions would be assumed under the agency's new response plan to more actively address upset events.

[^1]
## Issue 5

## Unregulated Environmental Laboratories Place TNRCC at Greater Risk of Basing Regulatory Decisions on Unreliable Data.

## Summary

## Key Recommendations

- Require TNRCC to implement a voluntary environmental laboratory accreditation program consistent with national standards.
- Transfer the Safe Drinking Water Lab Assessment Program from the Texas Department of Health to TNRCC.
- Require TNRCC to only accept data/analyses from accredited labs for all decisions affecting permitting, compliance, enforcement, and corrective action.
- Exempt all on-site or in-house labs from accreditation.


## Key Findings

- Oversight of environmental labs providing data to the State is inconsistent and divided between agencies.
- Unregulated, unaccredited labs are more likely to produce inaccurate data for agency decisionmaking, resulting in increased risk to public health and the environment, and increased agency costs.
- Uniform standards provided by a national accreditation program would allow Texas labs to effectively compete with accredited labs in other states.


## Conclusion

TNRCC is not authorized to regulate the labs that produce data used to demonstrate compliance with federal and state environmental laws. Confidence in the data generated from laboratories can be enhanced through an accreditation program. The National Environmental Laboratory Accreditation Conference, a voluntary association of state and federal agencies, has developed national standards and an accreditation process that states may adopt and implement.
TNRCC would be given authority to adopt and implement the National Environmental Laboratory Accreditation Program. The accreditation program should be voluntary for commercial labs, allowing market competition and reciprocity to serve as incentives for participation in the program. However, to ensure the reliability of the data on which TNRCC relies for its decisionmaking, the agency would be required to accept only data from accredited labs, with the exception of data generated from on-site or in-house labs.

## Support

Current Situation: Oversight of environmental labs providing dâta to the State is divided between the Texas Natural Resource Conservation Commission and the Texas Department of Health.

- Environmental labs provide data and datà anàysis used by TNRCC; TDH: and regulated entitiés to demonstrate compliance with féderal and state envirohmental lâws and regulations.
- Environmental labs are subject to quality ãssurance and quality control inspections by TNRCC upon request by program staff, and as resources allow. On-site or in-house labs are subject to review as part of facility-wide permit compliance inspections. On-site labs at wastewater treatment plants can forgo an inspection altogether if the permitted facility has demonstrated general compliance. ${ }^{1}$
- The Texas Department of Health (TDH) currently administers a mandatory lab assessment program under the Federal Safe Drinking Water Act. In 1999, the Legislature expanded the lab assessment program to include a voluntary accreditation program for environmental laboratories consistent with national standards: ${ }^{2}$ As a first step in meeting this new mandate, TDH will invoke a voluntary 1 Lab accreditation program for wastewater labs that report data and analysis to TNRCC. TDH is in the process of adopting national standards for both its Safe Drinking Water Act làb accreditation program and wastewater lab accreditation program.


## Problem: TNRCC's lab inspection program is not adequate to detect

 problems or require corrective action.- TNRCC estimates that betwêen $1 ; 300$ and 1,400 environmental labs perform analyses under its statutes. While the agency does perform inspections of labs, it lacks the ressources to conduct these inspections regularly. On averrage, major labs may be inspected once every three to four years while small labs may go as long as eight years between inspections. ${ }^{3}$ TNRCC gives priority to those labs under agency contract or subcontract, and to those labs for which staff have requested inspections. For fiscal year 2000, labs prioritized for inspection make up just 5 percent of the total number of labs providing data to the agency, and only 2.5 percent are scheduled for inspection. ${ }^{4}$
- While no laboratory inspection is guaranteed to discover all problems, the inspection history of a single laboratory currently under federal investigation illustrates the inadequacies of the agency's current inspection program. The text box, Case Example: Lab Inspection


## TNRCC inspects just

2.5 percent of the 1,300 to 1,400 environmental labs providing data.

History, provides excerpts of TNRCC inspection reports in which the inspector, while noting deficiencies, repeatedly concluded that the lab met or exceeded standards. The problems with the lab were eventually revealed by a self-audit conducted by new management.

- TNRCC lacks authority to require corrective action of environmental laboratories that generate poor data. If the agency determines through complaints, or a quality assurance inspection, that a problem with a laboratory exists, it may issue a notice of deficiency and recommend corrective action. If the problem is not corrected, the agency has no recourse except to reject the data and stop working with the lab. Even so, TNRCC may have difficulty enforcing its decision to reject data from a specific lab for some wastewater permits in which data is self-reported. In severe cases, the agency may work with the federal government in conducting criminal investigations.

Problem: Unregulated, unaccredited labs are more likely to produce inaccurate data for agency decision making, resulting in increased risk to public health and the environment, and increased agency costs.

- Environmental lab testing and data analysis is critical to environmental regulation. Without reliable laboratory methods and reporting procedures to ensure the accuracy of scientific data, the ability of environmental rules and standards to effectively protect the public is seriously undermined.
- Currently, a Texas lab that provided sample analyses for environmental consulting firms, industry, and government entities, including serving as a contract lab for TNRCC from 1992 to 1996, is under federal investigation for potential fraud related to improper sample handling and/or analytical practices. According to EPA, all data generated from the lab for a wide range of analyses including Superfund, air, toxics, and water quality should be considered potentially unreliable. These data integrity problems have required TNRCC to review all regulatory decisions from January 1991 to January 1998 in which data generated from this lab was used.

TNRCC's initial file search to discover regulatory actions affected by the questionable lab data spanned five months and covered 10,937 sites. The search identified 1,692 sites and three state-lead Superfund sites in which questionable data was used to guide agency decision making. The table, Potentially Affected Programs and Sites, provides

Without reliable laboratory methods to ensure the accuracy of scientific data, the agency cannot ensure that environmental regulations effectively protect the public.

| Potentlally Affected Programs and Sites |  |  |  |
| :--- | :---: | :---: | :---: |
| Program | Sites <br> Searched | Sites Found with <br> Questlonable Data | Percent of Sites Found <br> with Questionable Data |
| Petroleum Storage Tanks | 10,019 | 1,500 | $15 \%$ |
| Corrective Action | 790 | 163 | $21 \%$ |
| Voluntary Cleanup | 122 | 25 | $20 \%$ |
| Innocent Landowner | 6 | 4 | $67 \%$ |

additional results of the agency's file search. The search for affected sites and the site audits needed to reevaluate the agency's decisions represent a significant cost to TNRCC.

- Following a two-year investigation led by a federal task force, officials of another Texas lab were indicted for fraud related to the falsification of environmental test reports. The lab provided data to TNRCC for several permitted sites and facilities including refineries, chemical companies, and municipalities. Although no documented harm to public safety or the environment resulted, the improper testing of wastewater could have exposed thousands of area residents to unacceptable levels of pollutants.


## Result: Without the uniform standards provided by a national

 accreditation program, Texas labs cannot benefit from reciprocity or effectively compete with accredited labs in other states.- Uniform standards are provided by the National Environmental Laboratory. Accreditation Conference (NELAC), a voluntary association of states and federal agencies. ${ }^{5}$ These uniform standards promote the comparability and defensibility of data, and allow for more cost effective use of data by multiple stakeholders.
- Uniform standards provide accredited labs with the opportunity for reciprocity. One year ago, NELAC approved the first set of states for national accreditation programs. Since then, at least 24 Texas labs have applied for accreditation from states with NELAC authority. Upon achieving accreditation, these labs may conduct data analysis acceptable in any NELAC-approved states, without having to be separately accredited. ${ }^{6}$
- The lack of uniform standards puts laboratories in Texas at a competitive disadvantage for federal and private sector contracts. In 1997, 37 states had enacted legislation for lab accreditation. ${ }^{7}$ An early NELAC study found 40 states expressing interest in adopting a
national accreditation program, and within the last year, more than 20 states applied for NELAC approval to administer the program. NELAC is expected to become a standard prerequisite for bidding on most public and private sector lab contracts. Twelve states including California, Louisiana, and Florida are currently approved to administer the national environmental lab accreditation program.


## Recommendation

## Change in Statute

### 5.1 Require TNRCC to adopt rules to implement a voluntary environmental laboratory accreditation program consistent with national standards.

The agency would establish by rule a program to accredit environmental laboratories, including TNRCC labs. The program should be consistent with the national accreditation standards approved by the National Environmental Laboratory Accreditation Conference. The accreditation program would serve to ensure that environmental laboratories provide sufficiently accurate and consistent measurements and analyses. This would effectively supersede TDH's authority to accredit environmental labs.

Consistent with NELAC requirements for reciprocity, TNRCC should provide, by rule, for the accreditation of environmental laboratories accredited by NELAC-approved authorities in other states. TNRCC should also establish by rule conditions for denying, revoking, suspending, or modifying accreditation.

### 5.2 Transfer the Safe Drinking Water Lab Assessment Program from the Texas Department of Health to consolidate it with the new accreditation program at TNRCC.

This recommendation would transfer TDH authority for the Safe Drinking Water Act laboratory certification program and all related employees and resources to TNRCC. Consistent with federal requirements, labs performing analyses under the Safe Drinking Water Act would continue to be subject to mandatory accreditation.

### 5.3 Require TNRCC to only accept data and analyses from accredited labs for all decisions affecting permitting, compliance, enforcement, and corrective action.

The environmental laboratory accreditation program would be voluntary for all labs. Only those labs providing data to TNRCC would be required to first obtain accreditation. To give interested labs time to obtain accreditation, the requirement should become effective two years from the date the State's program is approved by NELAC.

### 5.4 Exempt on-site or in-house labs from the accreditation requirement.

On-site and in-house labs would continue to be subject to site-wide permit inspections.

### 5.5 Authorize the agency to assess laboratory accreditation fees sufficient to recover program administration costs.

The agency would be authorized to adopt rules establishing a schedule of reasonable fees to be paid by any laboratory applying for accreditation. The schedule of fees would be designed to recover the cost associated with accreditation. Funds received would be deposited in a fund maintained by the agency, which would be appropriated to the agency to offset the costs of the program. Any balance in excess of $\$ 1,000$ remaining at the end of the fiscal year would lapse to the General Revenue Fund.
Fees would include reimbursement to the State for all costs associated with a routine assessment or follow-up inspection. This would include staff expenses resulting from time spent reviewing an application and preparing for inspection, travel to and from a laboratory, inspection of a laboratory, report preparation, and necessary travel expenses.

## Impact

The intent of these recommendations is to provide a system that would increase the reliability and defensibility of data provided to the agency for compliance purposes. This should increase confidence in agency decision making, provide greater assurance of protecting public health, and minimize unnecessary costs for the agency. The Legislature already approved the adoption of NELAC standards in its authorization for TDH to develop an environmental lab accreditation program. This authority would transfer to TNRCC, and would expand to require that all labs providing data to the agency be accredited. On-site or in-house labs would be exempt from this requirement, as the potential cost of accreditation would pose an additional burden that would not necessarily result in greater assurances of data reliability.
The recommendation to transfer the lab certification program from TDH to TNRCC is not a reflection of any problems at TDH. TNRCC is the State's primary authority for all major environmental laws and has been very involved in the National Environmental Laboratory Accreditation Conference. While TDH has a safe drinking water laboratory certification program in place, the number of labs certified by that program is less than 100. Comparatively, the number of environmental labs providing data under TNRCC statutes is estimated at between 1,300 and 1,400.

## Fiscal Implication

The recommendations would require TNRCC to administer an environmental laboratory accreditation program and establish an annual accreditation fee in an amount sufficient to defray the cost of program administration, including increased staffing. The recommendation would result in annual revenues of $\$ 427,805$ to pay the cost of the program and would increase the number of TNRCC staff, as shown in the chart on the following page.
TNRCC currently has one laboratory inspector. Sunset staff estimate that five additional inspectors will be needed to accredit the approximately 400 commercial laboratories currently providing analyses. to TNRCC. The following estimates are based on 200 lab inspections per year and include travel expenses. The estimates also include employee salaries and benefits.

| Fiscal <br> Year | Revenue Gain to <br> Dedicated Fee <br> Revenue | Cost to Dedicated <br> Fee Revenue | Change in FTEs <br> from FY 2001 |
| :---: | :---: | :---: | :---: |
| 2002 | $\$ 427,805$ | $\$ 427,805$ | +5 |
| 2003 | $\$ 427,805$ | $\$ 427,805$ | +5 |
| 2004 | $\$ 427,805$ | $\$ 427,805$ | +5 |
| 2005 | $\$ 427,805$ | $\$ 427,805$ | +5 |
| 2006 | $\$ 427,805$ | $\$ 427,805$ | +5 |

[^2]
## Issue 6

## State Environmental Regulation Lacks the Benefit of Comprehensive Research on the Long-Term Impacts of Pollution.

## Summary

## Key Recommendation

- Require TNRCC to coordinate and facilitate agency research needs and efforts.


## Key Findings

- TNRCC performs environmental monitoring and risk assessments, and is involved in independent research efforts.
- Monitoring and risk assessments are insufficient to draw conclusions about long-term impacts of pollutants on human health and the environment.
- Other states have implemented comprehensive research programs to support environmental regulatory efforts.


## Conclusion

The application of science-based understanding of pollutants, and their long-term impacts on human health and the environment, to regulatory policies would result in more cost-effective regulation for the State and regulated entities. Currently, this understanding is being gained through environmental research performed by local governments, universities, private industry, and nonprofit organizations. However, State involvement in these efforts is not consistent. Without state coordination and participation in developing environmental research, these efforts are of limited value to the State in planning for future environmental regulatory issues, or assessing the long-term impacts of pollution on human health and the environment.
This recommendation would assist in ensuring that the State's environmental research priorities are addressed, and that sound, scientific findings are incorporated into the State's environmental regulatory policies.
TNRCC moñonitờ'sènvironmientälcönditioǹ sa and hàas ànèw efforit toméäsứreimprơovemènt inenvironmentálquality.

## Support

Current Situation: TNRCO performs environmental monitoring and risk assessiments, and is involved in independent research efforts.

- TNRCC routinely performs data collection and analiysès through its complianice and enforcement monitoring efforts: Environmental monitoring enables TNRCC to identify poliutants and determine their concentrations at a particular point in time: Currently, TNRCC maintains more than 120 air monitoring stations and more than 700 water quality monitoring sites in various water bodies across the state. TNRCC's Toxicology and Risk Assessment program evaluates the monitoring data and performs toxicológical assessments too determine the potential of pollutants to cause adversè health effects to the general public.
- TNRCC is currently developing environmental indicators that will allow the agency to identify trends in environmental conditions, and better understand interrelations betwèen environmental factors. An environmental indicator is a quantitative measure over time of the progress made toward achieving environmental objectives: ${ }^{1}$ Examples of environmental indicators include dissolved oxygen concentrations, as an iridicator of water quality; benzene emissions from point sources; à an indicator of air quality; and toxins in fish tissue, as a biological indicator. TNRCC expects this information will aid in assessing trends and developing plans añ strategies for measurably improving environmental quality.
- Currently, TNRCC is participating in the Texãs 2000 Air Quality Study, a federal, state, and higher education effort to better understand basic chemical, meteorological, and atmospheric transport processes that determine ozone and fine particle distributions. The study will focus on the Hoüston area and the Gulf Coast region of southeastern Texas, and is expected to assist policymakers in devising optimal ozone and particulate matter management strategies. TNRCC will contribute $\$ 1.3$ million in direct financial support as well as routine air monitoring data that approximates $\$ 3.5$ million in in-kind contributions. ${ }^{2}$ The total cost of the project is an estimated $\$ 20$ million. ${ }^{3}$
- TNRCC is involved with the Texas Hazardous Waste Research Center at Lamar University. The Center, created in 1988, conducts research, evaluation, testing, development, and demonstration of alternative or innovative technologies in minimization, destruction, and handling of hazardous waste. TNRCC has representation on the Center's executive and air research advisory councils. These councils define program goals and attempt to match research efforts
to State needs. The Legislature appropriates approximately \$1 million annually to the Hazardous Waste Research Center for research. ${ }^{4}$

Problem: Monitoring and risk assessments are insufficient to draw conclusions about long-term impacts of pollutants on human health and the environment, or create appropriate state-specific solutions.

- No state agency is coordinating research on the long-term impacts of pollution on human health or the environment. Although TNRCC routinely performs monitoring and assessment activities, these efforts are insufficient to draw conclusions about the longterm impacts on human health and the environment caused by pollution. TNRCC's monitoring efforts may allow the agency to identify trends or patterns in pollution concentrations, but without understanding pollutant pathways and interactions, regulation may be ineffective or inefficient. ${ }^{5}$
- While environmental research is performed by universities, private centers, local governments, other states, and the federal government, these efforts often largely go untracked by the agency. TNRCC does not have a central effort to track and participate in research opportunities. The result is that these efforts have limited applicability for the state's regulatory needs. For example, a City of Houston study on health benefits of improved air quality is a one-time study in a specific location and will consequently have limited value in supporting regulations. ${ }^{6}$
- TNRCC is hampered in its ability to define solutions for the state's environmental issues. Without state-driven research, TNRCC must accept and implement federal directives that may not be appropriate for Texas. As an example of state-directed research resulting in a state-specific regulatory solution, the California Air Resources Board has been instrumental in establishing the California vehicle emissions standards. California is the only state authorized to have vehicle emission standards different than federal standards.
- Without an ongoing research effort, the State frequently reacts to problems in crisis mode, unable to plan effectively for long-term regulatory needs. For example, the State has had to reverse its regulatory efforts with respect to ozone reductions as a result of its limited understanding about certain types of air emissions. A brief explanation of ozone is provided in the textbox, Ozone Formation.


## Ozone Formation

Ozone formation is a photochemical process. In the presence of sunlight, oxygen reacts with nitrogen oxides $\left(\mathrm{NO}_{\mathrm{x}}\right)$ and volatile organic compounds (VOCs) to produce ground level ozone which is harmful to people, animals, crops, and many common materials.
$\mathrm{NO}_{\mathrm{x}}$ is produced by combustion engines, which are used in power plants, boilers, heaters, incinerators, trucks, and automobiles.

VOCs come from sources such as gasoline, solvents, paint, and even trees.

In the early 1990 's, TNRCC demonstrated that nitrogen oxides $\left(\mathrm{NO}_{\mathrm{x}}\right)$ reductions would not be necessary to attain National Ambient Air Quality Standards for ozone, and that the reduction of volatile organics alone would be sufficient. In 1994; the EPA respondéd and exempted the Dallas/Fort Worth area from $\mathrm{NO}_{x}$ standards: However, in 1998, after an extension of the exemption; Dallas/ Fort Worth failed to meet the ozone standard, and was reclassified by EPA as being in serious nonätainment fơr òzonie:
At about the same time, new modeling showed that $\mathrm{N} \Theta_{x}$ reductions were, in fäct, necessary for the area's attaininent of the ozone standard. Consequently, significant $\mathrm{NO}_{\mathrm{x}}$ reductions, are now necessary to achieve attainiment. ${ }^{7}$

- TNRCC faces similar challenges in providing for the state's water quality. Through its Total Maximum Daily Load (TMDL) program, TNRCC attempts to restore and maintain the beneficial uses; such as drinking water, recreation, and aquatic life; of impaired or threatened water bodies: A TMDL is the amount of pollution a water body can receive and still meet standards for its designated úse. ${ }^{8}$ Currently 200 water bodies have been designiated as impaired:
Under the U.S. Clean Water Act, states are authorized to apply specific water quality standards according to the specific needs of the state. However, efforts to develop TMDLs are still new and èvolving. With minimal federal guidance, and given the complex nature of trying to estimate cumulative impacts of point and nonpoint source polliutants on a water body, the challenge for Texas is significant. ${ }^{9}$ Without the benefit of scientific research on cumulative impacts; TNRCC is àt risk of again applying ineffective standards or regulations.
Comparison: Other states have implemented comprehensive research programs to support environmental regulatory efforts.

A wide range of research programs exist in other states. Program budgets range from one to several million dollars. Varying in size; some programs perform in-house research, while others contract with universities, private centers, and government agencies for research. However, a common element of each program is the centralized coordination of the research efforts. The table; State Research Programs, provides a list of programs and achievements.

| State Research Programs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State | Program | Purpose | Structure | Achievements | Annual Budget |
| CA | California Air <br> Resources <br> Board Research <br> Division | To study the composition of pollutants, mechanisms of pollutant emission and transport, chemistry and physics of atmospheric reactions that affect pollutants, the effects of pollution on human health and the environment, the economic impact of air pollution, and approaches to reducing emissions. | Division of the California Air Resources Board | California has made major contributions in the field of vehicle pollution and is the only state authorized to establish vehicle emission control standards different from federal standards. | \$7.6 million |
| MA | Massachusetts Office of Research and Standards | To advise on adverse health effects associated with toxic substances in the environment, participate in standard settings processes with other state regulatory agencies, and manage an environmental research program. | Division of the Massachusetts Department of Environmental Protection | The Office of Research and Standards produced the Chemical Health Effects Methodology and the methodology for setting Allowable Ambient Limits. | N/A |
| NJ | New Jersey Science, Research and Technology Division | To provide the technical foundation for the Department's policy and regulatory decisions. Specific programs include developing environmental indicators, beach replenishment, and remediation of chromium contamination. | Division of the New Jersey Department of Environmental Protection | The Science, Research and Technology Division performed an industrial survey after which the U.S. Environmental Protection Agency's Toxic Release Inventory was modeled. | \$3 million |
| IL | Waste Management Research Center | To develop solutions to environmental waste problems, and provide technical assistance to industry, agriculture, and communities. | A stand-alone agency administratively linked to the Illinois Department of Natural Resources | The Illinois Waste Management Center provides ongoing services to industry in pollution prevention. | \$3 million |
| WI | Environmental Contaminants Research Section | To acquire original knowledge and apply the scientific method to solving environmental and natural resource problems. | Section of the <br> Department of Natural Resources, Integrated Science Services | The Environmental Contaminants Section provided the scientific data to support legislated reductions in acid rainproducing sulfur dioxide. | \$1.4 million |

## Recommendation

## Change in Statute

### 6.1 Require TNRCC to coordinate and facilitate agency research needs and efforts.

Through a new position or division, the agency would coordinate or relate practical regulatory needs to the scientific and academic communities, and explore private and federal funding opportunities. If funding is appropriated, TNRCC would be authorized to direct and facilitate research based on the agency's needs through the administration of grants or contracts with state universities. An academic advisory board may be needed to assure that appropriate incentives are in place for university participation. This effort would coordinate with other existing state initiatives, and work with universities and the Higher Education Coordinating Board. This recommendation would not authorize the agency to direct or establish research efforts of others.
The agency would also explore funding opportunities to support the Texas Department of Health in fulfilling its statutory mandate to conduct toxicological and epidemiological investigations of human illnessès resulting from environmental exposures. ${ }^{10}$

### 6.2 Require TNRCC to report to the Legislature on its ongoing research efforts and outcomes.

The report would be part of TNRCC's existing annual report and would describe any cooperative efforts; show funds spent; and track the purpose, results, and implementation of any research conductèd.

## Impact

Better understanding of pollutant pathways, interactions, and reactions in the environment, based on scientific research will enable the TNRCC to more effectively and efficiently plan and regulate. Both TNRCC and the regulated community would benefit from more cost-effective regulation, while the public would have greater assurance that human health and the environment are being protected. The application of new scientific knowledge to environmental regulatory programs would be enhanced through the involvement of TNRCC.

## Fiscal Implication

This recommendation would have no immediate fiscal impact to the State. The agency would use existing staff resources to explore funding opportunities and coordinate research efforts with state universities. However, as a result of this recommendation and the securing of outside funding, a positive fiscal impact may result in the future. Any increased funding for research would be a legislative appropriations decision, and was not estimated for this report. Research funding could be made available without needing to raise additional revenues if the Legislature provides TNRCC with greater flexibility in spending dedicated fee revenues, as outlined in Issue 10 of this report.

[^3]
## Issue 7

## The Public's Interest Is Not Adequately Supported in Agency Policymaking.

## Summary

## Key Recommendations

- Strengthen the Public Interest Counsel by making it a Governor-appointed position, with clear responsibility for representing the public interest in TNRCC rulemaking and the ability to appeal Commission decisions in court.
- Disqualify persons from being appointed to the Commission if they have received significant income from a regulated entity within two years before appointment.
- Require the agency to track and report the use and composition of Commission-appointed and staff-level stakeholder groups and require these groups to be composed of a balanced representation of affected stakeholders.


## Key Findings

- The nature of environmental regulation requires careful consideration of the public's interest in agency decisions.
- The representation of the public interest in environmental matters lacks adequate resources and does not reflect comparable efforts in the regulation of utilities and insurance.
- The public's interest is at a disadvantage on many advisory committees and informal stakeholder groups, and in the agency's internal guidance process.


## Conclusion

These recommendations would provide greater assurance that the public's interest is represented before the Commission. Strengthening the Office of Public Interest Counsel reflects the Legislature's intent in creating the office, and would reflect the Commission's current commitment to appointing a strong defender of environmental and consumer interests. Adding an eligibility requirement for future appointees to the Commission would build on existing statutory language requiring the Commissioners to represent the general public. The recommendations regarding stakeholder groups would provide for open communication between the agency and the public, and also apply current state law to informal workgroups and task forces, which often have a hand in setting far-reaching State policy.

## Support

Current Situation: The nature of environmental regulation requires careful consideration of the public's interest in agency decisiotis.

- The agency's mission statement, to protect the State's human and natural resources consistent with sustainable economic development, illustrates the balancing act that the Commission engages in with every decision it makes. To accomplish its mission, the agency must seek and consider a full range of views and opinions, including those of the regulated community and public. ${ }^{i}$
- One way the Legislature attempts to ensure effective representation of the public's interest in state policy decisions is by providing guidance to the Governor for appointments to policymaking boards. The Legislature's intent is to prohibit state officers from having any direct or indirect interest, or incurring any obligation of any nature "that is in substantial conflict with the proper discharge of the officer's...duties in the public interest." ${ }^{2}$

Within TNRCC, the Legislature sought to ensure consideration of the public interest by making the Commission a body of three public members with no direct interest in the entities regulated by the agency. It also created the Office of Public Interest Counsel with the responsibility for promoting environmental and citizens' concerns including environmental quality and consumer protection. ${ }^{3}$ The Office is headed by the Public Interest Counsel, an attorney appointed by the Commission on the advice of the Executive Director, and staffed with six additional attorneys.

- Besides the statutorily created Public Interest Counsel, the Commission, on its own initiative, created the Office of Public Assistance in 1996, to improve the public's ability to understand and get involved in agency decisions, primarily by answering questions from members of the public on permits and the permitting process. This Office's efforts are often aimed at addressing one-time events, such as the public health concern from haze caused by fires in Mexico in 1998, or responses to individual permit applications and hearing requests. ${ }^{4}$
Like the Public Interest Counsel, the Office of Public Assistance is in the Commissioners Office at the agency. The chart, Commissioners Office - Fiscal Year 2000 Operating Budget, shows the distribution of financial resources for these and other offices that report to the Commissioners.


# Commissioners Office <br> Fiscal Year 2000-Operating Budget 



- Another important avenue for public participation is through advisory committees, informal workgroups, and task forces. The Commission and agency staff often rely on these groups to provide needed input into policy decisions, especially rulemaking. Of the 27 advisory committees that report to the agency, 11 committees are created in law, and 16 committees are created under the Commission's general authority. In addition to these formal advisory committees, numerous workgroups and task forces bring outside perspectives into agency decisions. Some groups are short-lived and provide input on a narrow issue. Other groups provide long-term input into a wide range of agency activities. The agency uses these groups in the development of rules and guidance documents, which set statewide environmental policy.
Problem: The representation of the public interest in environmental matters lacks adequate resources and does not reflect comparable efforts in the regulation of utilities and insurance.
- The Public Interest Counsel cannot fulfill its statutory duty to represent the public interest in all proceedings before the Commission. The Office, with seven attorneys and two support staff, has primarily participated as a party in contested permit cases. Although the Counsel provides balance to the permitting process, it is unable to effectively represent the public in other arenas, such as rulemaking. ${ }^{5}$
Other factors raise concerns regarding the Public Interest Counsel's ability to independently carry out its duties. Unlike its counterparts in insurance and utilities, which have independent agencies, the Public Interest Counsel is hired by the Commission, and relies on the Commission for its staff and budget. In addition, the Counsel unlike the Public Insurance and Public Utility Counsels - is statutorily prohibited from appealing a decision of the Commission. Finally, the Public Interest Counsel lacks the ability to obtain independent

The Public Interest Counsel does not have the independence or the resources of its counterparts in the regulation of insurance and utilities.

> A member of the Public Utility Commission may not have received income from a utility or competitor for two years before appointment.
technical support and instead relies on the Executive Director's staff. In the contested case process, the Counsel typically opposes the agency's proposed action while at the same time relying exclusively on the Executive Director's staff for technical support. While the current Commission is committed to the need for the existence of the Office, and has directed it to provide greater assistance to citizens who are challenging agency actions, these factors may cause conflicts.

- The Legislature has included additional protections for certain state policymaking bodies. For example, a person is ineligible for appointment to the three-member Public Utility Commission if the person received income from a public utility or a competitor of a public utility within two years preceding appointment. ${ }^{6}$

However, this guidance for TNRCC is incomplete. State law incorporates a federal requirement under the Clean Water Act that disqualifies appointees who received significant income from a regulated entity within two years preceding appointment. ${ }^{7}$ This requirement prohibits the appointment of a person with a direct interest in an entity subject to water quality regulation under the Texas Pollutant Discharge Elimination System permit, but does not apply to a person with similar ties to an entity under the agency's air or waste programs.
Problem: The public's interest is at a disadvantage on many advisory committees and informal stakeholder groups, and in the agency's internal guidance process.

- Because advisory committees make direct recommendations that often result in the adoption of rules and policies by state boards and commissions, state law requires balanced representation on these groups. ${ }^{8}$ TNRCC rules incorporate this statutory requirement. ${ }^{9}$ However, examples of the difficulty in achieving balanced representation on advisory committees exist. For example, the Clean Air Responsibility Enterprise Advisory Committee, established by the Commission in 1997, provided recommendations to the Commission regarding a voluntary emissions reduction plan for grandfathered facilities. The committee's own recommendations were challenged in a minority report filed by three of the 11 members because of the belief that the committee was not balanced. ${ }^{10}$
- During the review, the agency had difficulty accounting for its use of informal committees, workgroups, and task forces. However, TNRCC's staff reported over 70 non-statutory groups that have provided direct input on agency rules or policies within the past three years. In some cases, agency staff may need to meet with members representing a specific interest. For example, the TNRCC/ Texas Chemical Council Permits Issues Workgroup was formed in

1998 to foster open communication between the agency and a specific sector of the regulated community. However, the failure to openly publicize the use and composition of these groups may foster a sense of mistrust with those individuals who are not included.

- Many stakeholder groups are not appointed by the Commission, but rather they are formed at the request of agency staff or an outside entity, and are more difficult for the Commission and the public to track. Nonetheless, these groups provide valuable input to agency staff. One example is the " 20 Points of Light Project," which developed a guidance document for Underground Injection Control program staff. This workgroup consisted of eight TNRCC employees and nine Texas Chemical Council representatives. The existence of this group was not public knowledge until public interest advocates discovered it through an open records request. ${ }^{11}$
- To keep up with changing business practices and new technologies, the agency's staff is often asked to interpret a rule or permit provision in light of a new process. In the agency's air program, the rule interpretation team issues opinions to clarify rules that are considered ambiguous. While the agency sees this process as a service to the regulated community, and does a good job posting these opinions on its website, these opinions could have the effect of changing policies without the benefit of public notice and comment. According to agency staff, these interpretations are not typically needed for the water program, and the waste program is currently developing a process to make its rule interpretations publicly available.

The agency's process for interpreting rules sometimes omits input from the affected public.

## Recommendation

## Change in Statute

### 7.1 Strengthen the Office of Public Interest Counsel.

This recommendation would strengthen the Office through the following changes.

- Require the Governor to appoint the Public Interest Counsel with the advice and consent of the Senate.
- Specify that the role of the Public Interest Counsel includes representing the public's interest in the development of agency rules and policies.
- Authorize the Public Interest Counsel to appeal a decision of the Commission in court.
- Authorize the Public Interest Counsel to use technical support outside of the agency where the potential for conflict exists between it and the Executive Director.

These recommendations would strengthen the Office of Public Interest Counsel without creating a separate agency. The recommendation to require the Governor to appoint the Public Interest Counsel would address the appearance of a conflict in the current employment relationship with the Commission. The Governor would appoint a Public Interest Counsel with demonstrated experience in promoting the public's interest and protecting the environment. The appointment would be for a two-year term and could be renewed by the Governor.
The recommendation specifying the Public Interest Counsel's role in agency rules and policies would clarify current law by directing the Counsel to take a more active role in this aspect of agency decisionmaking. Allowing the Public Interest Counsel to appeal a decision of the Commission would be comparable to that of the Public Insurance Counsel and the Public Utility Counsel, giving it the right to initiate or intervene in a judicial proceeding arising out of a Commission action. Allowing the Public Interest Counsel to obtain outside technical support would ensure that it has the ability to get information needed to make independent decisions, without creating a full-time technical staff devoted solely to this Office.

### 7.2 Disqualify persons from being appointed to the Commission if they have received significant income from a regulated entity within two years before appointment.

This recommendation would apply the same limitation on appointees to the TNRCC that currently exists for appointees to the Public Utility Commission. The recommendation would apply to appointments made after the provision becomes effective. In addition, the recommendation would codify and expand the existing provision prohibiting the appointment of a person who received significant income from an entity subject to permitting under the Texas Pollutant Discharge Elimination System in the two years before appointment.

### 7.3 Require the agency to track and report the composition and use of Commission-appointed and staff-level advisory committees, workgroups, and task forces.

This recommendation would require the Executive Director to monitor the composition and use of formal and informal stakeholder groups. The recommendation would not require an additional legislative report, but rather would require the agency to post the composition of all advisory committees, workgroups, and task forces in a manner that is easily accessible to members of the general public, such as on the agency's website.

### 7.4 Require advisory committees, workgroups, and task forces to be composed of balanced representation of affected stakeholders.

This recommendation would require the agency to identify affected stakeholders for advisory committees, workgroups, and task forces. Because in some cases agency staff appropriately meet with members representing a specific interest, this recommendation would not require equal numbers of interest group representatives on all committees, workgroups, and task forces. In addition, this recommendation would not allow a rule or other Commission action to be challenged based on the composition of a stakeholder group, nor would it require the Commission to ensure that all invited participants attend scheduled meetings.

Management Action

### 7.5 TNRCC should use the Internet to promote public participation and access to agency information.

The agency's widely used website provides an opportunity for public participation and access to agency activities. The Commission should continue its commitment to using the Internet to provide information to the public. Rule interpretations for all media should be posted in an easily accessible format. In addition, the agency should broadcast Commission meetings and explore the possibility of broadcasting key advisory group meetings on the Internet.

## Impact

These recommendations would ensure that the public's interest is represented before the Commission. The recommendations strengthening the Office of Public Interest Counsel reflect the legislative intent in creating the Office, and would reflect the Commission's current commitment to appointing a strong defender of environmental and consumer interests. The recommendation adding an eligibility requirement for future appointees to the Commission would provide consistency with other state laws, and would build on existing statutory language requiring the Commissioners to represent the general public. The recommendations regarding stakeholder groups would provide for open communication between the agency and the public, and also apply current state law to informal workgroups and task forces, which often have a hand in setting far-reaching state policy.

Fiscal Implication
The recommendations to strengthen the Public Interest Counsel are intended to provide the Office the necessary tools to carry out its statutory duty with as little organizational change as possible. This recommendation may require legislative guidance through the appropriations process to direct the Commission to provide additional resources to the Public Interest Counsel from existing funding levels. The recommendations would require two additional attorney positions to work on rule packages as well as up to an additional $\$ 100,000$ a year to hire outside technical support. The additional positions and funds necessary to cover the costs for outside technical support could come from savings as a result of removing the Executive Director as a party to contested case hearings, as recommended in Issue 8 of this report.

[^4]
## Issue 8

## Having the Agency as an Advocate for Contested Permits Contributes to a Perception of Unfairness in the Decisionmaking Process.

## Summary

## Key Recommendations

- Remove the Executive Director as a party in contested permit hearings before the Commission, but allow the Director to present evidence as needed.
- Consolidate permit notice requirements in one statute.


## Key Findings

- State law provides for public participation in TNRCC permitting decisions.
- Statutory notice requirements are confusing for the agency and the regulated community.
- The Executive Director's role in contested cases makes the staff an advocate for permit applications, raising questions about the fairness and objectivity of the decisionmaking process.


## Conclusion

Public notice and the opportunity for a hearing allow the general public and affected parties to raise their concerns for Commission consideration on permit applications. Consolidating notice provisions in one statute would allow permit applicants and the public to better locate and understand when and how public notice is to be provided. Further, bringing notice provisions under one statute could serve as the basis for furure legislative efforts to provide greater consistency and remove redundant requirements.
As permit writer and advocate for the permit in contested cases, the staff gives the impression of working against the interests of permit protestants and swaying permitting decisions in favor of the applicants. This situation gives the impression that the decisionmaking process is unfair. Removing the Executive Director as a party in contested cases would allow the agency to focus on providing objective, technical information necessary for making informed decisions.

## Support

## Current Situation: State law provides for public participation in TNRCC permitting decisions.

- State law requires public notice, and an opportunity for hearings, to give members of the general public and affected individuals a chance to raise their concerns to the Commission in permitting decisions. While members of the general public benefit from notice and comment requirements, individuals who are personally affected by a permit decision have the additional right to request a hearing before the State Office of Administrative Hearings (SOAH). ${ }^{1}$

| Parties in a Contested Permit Case |  |
| :--- | :--- |
| Applicant | Regulated entity requesting a <br> permit or license from the <br> Commission. |
| Protestant | Person or group with a legal <br> right or economic interest, <br> not common to members of <br> the general public, which <br> could be affected by granting <br> the permit or license. |
| Public Interest <br> Counsel | Comm is is ion appoin tee <br> representing the interests of <br> the general public. |
| Executive <br> Director | Staff re pre e e n ting the <br> position of, and information <br> developed by, the agency. |

Granting a contested case hearing is a balancing act for the Commission, pitting the needs of applicants to secure a permit quickly and at a reasonable cost against the needs of the public to effectively participate in the permitting process to ensure their health, environment, and property is adequately protected by the permit. Contested case hearings allow private individuals and local governments to present evidence in the permitting process that the Commission might not otherwise have heard. According to TNRCC, a quarter of all contested cases result in a major change to the permit including, in some cases, denial or withdrawal of the application.
Contested cases for TNRCC permit applications usually involve four parties, each representing separate interests. These parties, and the interests they represent, are shown in the chart, Parties in a Contested Permit Case.

- The Legislature affirmed its commitment to maintaining public participation in environmental permitting decisions by passing House Bill 801 in the 1999 Session. House Bill 801 enhances the notice and comment process and streamlines the contested case process by limiting the issues that can be sent to SOAH to those raised during the comment period.

Problem: Statutory notice requirements are confusing for the agency and the regulated community.

- The provisions governing notice are found throughout the Health and Safety Code and Water Code, resulting in inconsistent and often confusing requirements, which may not be readily apparent to a
permit applicant. For example, House Bill 801 added a requirement for early notice, but it did not repeal any existing provisions. As a result, a person seeking to understand the requirements for notice on a landfill might believe that the provisions contained in Chapter 361 of the Health and Safety Code control, unaware that Chapter 5 of the Water Code contains an additional notice requirement.
The complexity of notice requirements is especially difficult for small businesses, which rarely have their own attorney on staff, and therefore rely on agency staff for guidance. Incorrect posting of notice usually means additional time and resources for the agency and the applicant, but could potentially result in the denial or withdrawal of a permit.
- Notice provisions differ for air, water, and waste permits based on the likely affected population. However, some differences in notice requirements have little basis and provide no benefit to the public. For example, 14 separate statutory requirements require publication of notice in a newspaper. Some provisions require publication in a newspaper of general circulation in the county in which the facility is located or proposed to be located, while other provisions call for publication in the newspaper of largest circulation.

Problem: The Executive Director's role in contested cases makes the staff an advocate for permit applications, raising questions about the fairness and objectivity of the decisionmaking process.

- Agency staff work directly with permit applicants to prepare the permit according to state law and agency rules. This process may require a significant investment in staff time and resources to prepare the permit for consideration by the Commission.
- Under Texas law, the Executive Director is a party in all hearings before the Commission. ${ }^{2}$ Because of staff's role on permit applications, this requirement often puts the agency in the position of having to defend an applicant's permit in a contested case. A private consulting firm hired by the agency found that "by going to a contested case hearing and the preparations of discovery, the permit writers are compelled to feel as if they are 'advocates for the permits.' They are often the ones who feel that they are on trial."3
As permit writer and party to the contested case, the Executive Director combines the role of expert witness and legal advocate to support the applicant on whose behalf the staff worked to prepare the permit. This situation puts the agency at odds with those who protest the permit, giving an impression that the agency opposes the protestants' interests. The agency, aware of this impression, has attempted to explain its position to citizens before cross-examining them in a contested case hearing. ${ }^{4}$

As permit writer and party to the contested case, TNRCC staff is both expert witness and advocate for the permit applicant.

In other agencies, staff participates in contested cases to ensure a complete record.

Further contributing to this impression of unfairness is the employment relationship between the Executive Director and the Commission. To the outside observer, the natural affinity of the Commission for its own staff, and the staff's acknowledged role as experts on permitting matters, confer a favored position to the staff's recommendations with both the SOAH judge and the Commission. As a result, the public has questioned the ability of this process to deliver fair and objective decisions on permit applications.

- The agency's position is that its role in contested cases is a source of objective technical information for SOAH judges, and ultimately the Commission. This approach is consistent with other state agencies with comparable contested case processes, but the extent to which agency staff participate in the hearing varies among agencies. For example, staff of the Public Utility Commission prepares and presents evidence in a proceeding before that Commission. However, unlike TNRCC's contested cases, utility rate cases involve numerous parties with a variety of interests, including the regulated utilities, large industrial and commercial customers, unregulated competitors, and municipalities. ${ }^{5}$
Other agencies' processes do not require the staff to be a party to the case. For example, state law allows, but does not require, the Texas Department of Insurance to be a party before the Commissioner of Insurance in contested rate cases. This provision was added to the law to ensure that the Commissioner of Insurance has a complete record to make a decision. ${ }^{6}$ Staff of the Texas Railroad Commission are not a party to its contested cases, but testify if called to provide expertise or technical information. ${ }^{7}$


## Recommendation

## Change in Statute

### 8.1 Remove the Executive Director as a party in contested permit hearings before the Commission, but allow the Executive Director to prepare and present evidence for the Commission or the Commission's appointed examiner.

This recommendation would remove the Executive Director as a party to a contested permit case before the Commission, but would instead require the Executive Director to provide needed information into the record to be considered by the Commission. The recommendation would require the Executive Director to provide technical or legal information as needed to ensure that the record before the Commission is complete. In addition, agency staff would be available to be called as expert witnesses to provide objective technical information during a contested case hearing. The recommendation
would not affect the staff's role in assisting applicants in preparing their permits to ensure technical completeness.

### 8.2 Consolidate permit notice requirements in one statute.

This recommendation would consolidate all notice requirements in Chapter 5 of the Texas Water Code. Because different activities have varying potential impacts on public health and the environment, the recommendation would not change existing notice requirements.

## Impact

The intent of these recommendations is to allow permit applicants and the public to locate and understand when and how public notice is to be provided. Consolidating notice provisions in one statute would not change any current requirements, but could serve as the basis for future legislative efforts to provide greater consistency and remove redundant requirements.

Removing the Executive Director as a party in contested cases before SOAH and the Commission would eliminate the perception that the agency sides with permit applicants against the interests of other parties opposing the permit. By not taking an advocacy position, the agency would be able to focus on providing objective, technical information necessary for the SOAH judge, and the Commission, to make informed decisions.

## Fiscal Implication

These recommendations would result in a savings to General Revenue by removing the Executive Director as a party in contested cases. The Executive Director would still play a vital role in the contested case process, providing technical information as well as legal support for permitting staff who would continue to be called as witnesses. However, the agency should realize cost savings by reducing legal staff time spent at contested case hearings. In fiscal year 1998, the agency spent approximately $\$ 2.3$ million on contested cases, of which $\$ 690,000$, or 30 percent, was attributed to legal costs, which do not include SOAH or program costs. Assuming that half of these legal costs would no longer be needed to prepare a case, the agency would save approximately $\$ 345,000$ annually. While no reduction in staff is estimated, workload adjustments from not preparing contested cases should give the agency staffing flexibility and could lead to staff reduction in the future.

| Fiscal <br> Year | Savings to <br> General Revenue |
| :---: | :---: |
| 2002 | $\$ 345,000$ |
| 2003 | $\$ 345,000$ |
| 2004 | $\$ 345,000$ |
| 2005 | $\$ 345,000$ |
| 2006 | $\$ 345,000$ |

[^5]
## Issue 9

## TNRCC Has Not Taken Advantage of Using the Public in Its Compliance Efforts.

## Summary

## Key Recommendations

- Require TNRCC to conduct an annual assessment of complaints filed with the agency.
- Require the agency to enhance coordination of complaint investigations with local officials.
- Require the agency to implement policies to respond to complaints after normal business hours and allow the submission of citizen-collected evidence for use by the Commission.
- Require the Commission to use cumulative complaint information in the agency's permitting process.
- Require the Commission to enhance public notice of agency enforcement actions.
- Authorize affected persons to intervene in agency enforcement actions that affect their health or property.


## Key Findings

- TNRCC's compliance process involves activities in which the public plays a role, including reporting complaints and commenting on enforcement actions.
- Commission practices and policies limit the collection and use of complaints made by the public.
- Current provisions for notice and comment on agency enforcement actions are inadequate for the public and affected property owners.


## Conclusion

TNRCC relies on public participation in its compliance and enforcement processes by investigating citizen complaints and allowing public comment on enforcement actions. While the agency places a priority on efficiently processing citizen complaints, the agency's policies limit its response to many complaints. In addition, opportunities exist to enhance public participation in agency enforcement decisions through meaningful public notice and the opportunity for affected landowners to intervene in cases that affect their property rights.

## Support

## Current Situation: TNRCC's compliance process involves activities

 in which the public plays a role, including reporting complaints and commenting on enforcement actions.- The lack of TNRCC resources to inspect every regulated facility makes citizen reports of potential violations of the state's pollution laws a valuable compliance tool. While most complaints do not result in enforcement actions, citizens provide the agency insight into daily conditions and operations of regulated facilities.

TNRCC regional staff investigate approximately 8,000 complaints a year. Agency data indicate that air and waste complaint investigations have decreased from fiscal years 1995 to 1999, while water-related - especially water utility - complaint investigations have increased. ${ }^{1}$ Under TNRCC policy, complaints are prioritized in five response categories, as shown in the chart, TNRCC Complaint Priorities.

| TNRCC Complaint Priorities |  |
| :--- | :--- |
| Priority 1 | Imminent threat to public health and safety or a high level of <br> political, media, or public concern - investigated immediately. |
| Priority 2 | High probability to adversely affect public health or safety- <br> investigated within 10 calendar days. |
| Priority 3 | Not an imminent threat to public health, but a potential real <br> threat to the environment - investigated within 30 days. |
| Priority 4 | No apparent threat to public health or the environment - <br> investigated when resources are available or as schedules allow. |
| Priority 5 | No longer investigated. ${ }^{2}$ |

[^6]- Under federal rules, TNRCC must allow public participation in enforcement actions for delegated programs. Federal rules provide the State three options for public participation. One option is to allow citizens to file suit to enforce the law, such as under federal environmental laws and under two Texas environmental laws. ${ }^{3}$ A second option allows a person with a legal interest in enforcement decisions to intervene, similar to current policy for contesting permit applications. A third option, the one currently offered by the agency, provides for public notice and an opportunity to comment on enforcement actions.


## Problem: Commission complaint policies limit sources of information for its use in making regulatory decisions.

- Commission policies and practices limit the information received by the agency and its ability to address complaints. Under agency policy, information on potential violations has become more difficult to confirm or is not collected or considered. For example, TNRCC regional staff report complaints received after hours are difficult to address because investigations typically occur only during normal business hours. ${ }^{4}$ In addition, for air complaints, Commission policy requires that its staff personally verify a violation. This policy combination restricts the agency's ability to act upon complaints that occur at times when agency staff are not available to confirm them. ${ }^{5}$
- Commission policy and practice also limit the use of other resources that could assist the agency's compliance efforts, including the use of credible citizen-gathered evidence, and the coordination of enforcement actions with local officials. Under the Texas Rules of Evidence and the Texas Rules of Civil Procedure, courts routinely make enforcement decisions based on evidence provided by citizens. However, Commission policy excludes the use of citizen gathered evidence for consideration in an enforcement action. ${ }^{6}$

Additionally, despite having the same authority as TNRCC to enforce state environmental laws, local officials report a lack of coordination with TNRCC, and the need for training to ensure efficient use of resources and consistent enforcement of the state's laws. ${ }^{7}$

A recent situation illustrates the limitations the Commission's own policies place on the agency. A large industrial facility experienced problems during a scheduled start-up, causing air emissions in excess of its permit. Since the event occurred between two and three o'clock in the morning, no agency staff were on hand to corroborate adverse health impacts. TNRCC received a complaint signed by 3,100 residents of a neighborhood, physician affidavits, observations made by a local health official, and a video tape of the incident. ${ }^{8}$ Since Commission policies do not allow the consideration of this information, staff could only recommend an enforcement action based on a minor reporting violation, rather than on the actual event that precipitated the health-related complaints. ${ }^{9}$

- Scrutiny of the agency's complaint data raises concerns about its ability to use complaint information to support its core functions of permitting and enforcement. TNRCC was unable to produce information on air and waste related complaints before 1995, preventing an analysis of the impact of changes in the Commission's complaint policies. ${ }^{10}$ Further, the agency itself fails to provide comprehensive analysis of complaint information. For example, data shows that fewer complaints are being recorded, and a greater

TNRCC investigations typically occur on weekdays between 8:00 a.m. and 5:00 p.m.
percentage of those complaints are classified as low priority complaints. ${ }^{11}$ The result is a greater percentage of citizen complaints that receive a slower agency response or no response at all. This trend is shown in the chart, Trend in Complaints Received by TNRCC, Fiscal Years 1995 to 1999.

## Trend in Complaints Received by TNRCC Fiscal Years 1995 to 1999

| Fiscal Year | 1995 | 1996 | 1997 | 1998 | 1999 |
| :--- | :---: | :---: | ---: | ---: | :---: |
| Total Air Complaints <br> Received | 5,521 | 5,026 | 4,645 | 4,536 | 4,185 |
| Low Priority: Air | 939 <br> $(17 \%)$ | 1,185 <br> $(23.5 \%)$ | 1,562 <br> $(33.6 \%)$ | 1,696 <br> $(37.4 \%)$ | 1,674 <br> $(40 \%)$ |
| Total Water <br> Complaints Received | 1,901 | 2,299 | 2,690 | 2,848 | 2,763 |
| Low Priority: Water | 267 <br> $(14 \%)$ | 534 <br> $(23.2 \%)$ | 799 <br> $(29.7 \%)$ | 652 <br> $(22.9 \%)$ | 573 <br> $(21 \%)$ |
| Total Waste <br> Complaints Received | 2,332 | 1,899 | 1,783 | 1,599 | 1,609 |
| Low Priority: Waste | 463 <br> $(19.9 \%)$ | 670 <br> $(35.3 \%)$ | 633 <br> $(35.5 \%)$ | 613 <br> $(38.3 \%)$ | 644 <br> $(40 \%)$ |

Without the benefit of comparable historical complaint information, and against a backdrop of changing policies, interpreting the above data is difficult - it may show that fewer complaints warrant agency attention, or that Commission policies have unintentionally dampened citizen confidence in how the agency responds to complaints.

Of particular note is the trend in the percentage of air complaints classified as low priority. Given the nature of air concerns, response time is a critical factor in assessing the validity of a complaint. In fiscal year 1999, the agency would not have been able to confirm 40 percent of all air complaints even if they were valid, because their classification means that they are not investigated for 30 days or longer after the fact.

- The agency does not use complaint information to strengthen its permitting process. TNRCC staff report that informal lines of communication between agency permit writers and field inspectors sometimes allow individual permitting staff to gain a better understanding of a facility's operations and potential trouble-spots. However, this activity is not part of an overall plan or policy to address
the underlying cause of citizen concerns through the permitting process.

Problem: Current provisions for notice and comment on agency enforcement actions are inadequate for the public and affected property owners.

- Agency enforcement actions are posted in the Texas Register. ${ }^{12}$ While this activity provides the minimum level of public participation needed to comply with federal regulations, it may not be meaningful for most ordinary citizens. By comparison, TNRCC permit applications require newspaper or mailed notice in addition to the Texas Register posting. Without widely accessible notice, the agency lacks assurance that the public and affected parties have the opportunity to comment on proposed enforcement decisions.
- A landowner lacks the ability to intervene in enforcement negotiations between the agency and an alleged violator, even if the violation occurred on the landowner's property. Alleged violators have the right to contest an agency enforcement order, triggering an administrative hearing process. ${ }^{13}$ During this process, the agency and the alleged violator negotiate the terms of an agreed order. However, an affected landowner, whose property may have been contaminated by a third party alleged violator, is not allowed to participate in these negotiations.

Because the law does not specifically provide for affected landowner intervention in enforcement proceedings before the Commission, the agency has taken the position that the law prohibits affected parties, other than the alleged violator and the agency, from participating in these hearings. This process creates additional risks for both the agency and the landowner. For example, in a recent case, TNRCC negotiated an agreed order with an alleged violator. The landowner was not allowed to intervene in the process even though he objected to the agreed order, which possibly left him with contaminated land and future remediation liability. ${ }^{14}$

Posting enforcement actions in the Texas Register is not meaningful for most citizens.

## Recommendation

## Change in Statute

### 9.1 Require TNRCC to conduct an annual assessment of complaints filed with the agency.

This recommendation would require the agency to conduct a comprehensive analysis of complaint information, including but not limited to complaints by air, water, and waste, priority classification, TNRCC region, agency response, enforcement action taken, and trends by complaint type. In conducting
its analysis, the agency shall include the impact of changes in its complaint policies. The assessment should be done in a manner that can easily be used to support the agency's permitting and enforcement functions. The agency would include a summary of its analysis in its statutorily required enforcement report.

### 9.2 Require the agency to enhance coordination of complaint investigations with local officials.

This recommendation would require TNRCC to share complaint information with local officials, and provide training to local enforcement officials. Training would, at a minimum, include procedures for addressing citizen complaints if TNRCC is unavailable or unable to respond, and an explanation of local government enforcement authority under state laws and rules. This recommendation would authorize TNRCC to require participating local governments to share the costs of training. This recommendation would allow local officials to investigate complaints that TNRCC is not able to investigate in a timely manner.

### 9.3 Require the agency to implement policies to respond to complaints after normal business hours.

This recommendation would require the agency to implement a policy allowing field inspectors to work flexible schedules. This recommendation would not require around-the-clock coverage in all areas of the state, or authorize the additional use of overtime.

### 9.4 Require the Commission to implement policies allowing a complainant to collect credible evidence for use by the Commission in enforcement actions.

This recommendation would require the Commission to implement policies, based on Texas Rules of Evidence, to allow enforcement actions to be taken based on credible citizen-gathered evidence. The recommendation would authorize, but not require, the Commission to base an enforcement action on evidence from citizens, if the evidence would suffice in a judicial proceeding. A citizen who submits evidence on which the Commission relies for all or part of an enforcement case, could be required to testify in an enforcement proceeding and would be subject to all available sanctions for falsifying evidence.

### 9.5 Require the Commission to use cumulative complaint information in the agency's permitting process.

This recommendation would require the Commission to develop a proçess to make citizen complaint information part of its permitting process. The recommendation would make citizen complaints, regardless of whether an individual complaint resulted in an enforcement action, an additional factor for the Commission to consider when making permitting decisions. For example, complaint information about a facility may reveal that simple operational changes could make a facility a better neighbor, easing public dissatisfaction.

### 9.6 Require the Commission to enhance public notice of agency enforcement actions.

This recommendation would provide a greater degree of notice for enforcement actions to the public and affected parties than the current requirement for publication in the Texas Register. The Commission,
through rules, would determine the appropriate method of notice for complainants, affected residents or property owners, and the general public. These notice requirements would be in addition to the Texas Register posting. Further, the Commission would not be required to publish or mail notice for all types of violations, but rather should tailor additional notice requirements to the type and degree of the violation. The Commission should ensure notice of enforcement actions are consistent with existing permitting notices.

### 9.7 Authorize affected persons to intervene in agency enforcement actions that impact their health or property.

This recommendation would give persons affected by an alleged violation the opportunity to participate in a hearing with the agency and the alleged violator. This recommendation would not allow a party, other than the agency, to initiate an enforcement action. The recommendation would authorize the agency, upon request by an affected person, to designate the person a party to an agency enforcement action, if the person's health or property is significantly impacted by the alleged violation.

## Impact

Greater opportunities exist for the public and local officials to participate in the enforcement of the state's environmental laws. The intent of these recommendations is to enhance the role of the public and local government in the agency's compliance processes by improving the agency's use of, and response to, citizen complaints, while providing a greater degree of coordination with local officials. By accepting citizen-gathered evidence, the Commission would have another tool in its compliance process, without being required to accept and use all citizen-gathered evidence to initiate enforcement.
The recommendations would also provide for meaningful public comment by making enforcement actions known to ordinary citizens who may have an interest in the action, but who do not read the Texas Register. In addition, Texans who are personally impacted by a violation of the State's pollution laws would have the same opportunity as the alleged violator to participate in the agency's resolution of the problem.

Fiscal Implication
These recommendations would have no significant fiscal impact. To comply with additional notice requirements for enforcement actions, the Office of the Chief Clerk, within the Commissioners' Office, would need additional up-front resources. However, costs of published or mailed notices should be recovered from a violator, and included in any penalty calculation under the Commission's current authority. ${ }^{15}$

Additional costs associated with providing training to local enforcement officials would depend on several factors, including TNRCC's ability to implement the recommendation through existing appropriation strategies such as enforcement and compliance support, or the percentage of the training costs paid by participating entities. Costs for this recommendation could not be estimated for this report.

1 Texas Natural Resource Conservation Commission Complaints System "Summary by Program/Media - Report1.4," "Reports for Fiscal Years 1995 - current," Austin, Tex., April 13, 2000 (computer printout).
2 Texas Natural Resource Conservation Commission memorandum, Types of Complaints Which Field Operations Will No Longer Investigate (Austin, Tex., January 11, 1995), lists 22 complaints which the agency will no longer investigate, including "complaints about environmental conditions which may have occurred but are not occurring now," and "complaints against concentrated animal feeding operations which are not prioritized either 1 or 2 ."
3 The federal Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act allow citizens to sue violators to stop and clean up illegal pollution without spending scarce government resources on enforcement. Recently, in the Laidlaw case, the U.S. Supreme Court upheld the Clean Water Act's provision letting citizens file suits to enforce the law. The Texas Legislature has recognized the benefits of allowing citizens to enforce certain environmental laws. In Texas, Radioactive Waste (Water Code, sec. 7.351) and Coal Mining (Natural Resources Code, sec. 134.182) laws allow citizen enforcement. However, these laws are the exceptions in Texas.
4 Interview with Leonard Spearman, Regional Director, Texas Natural Resource Conservation Commission Region 12, Houston, Texas, December 13, 1999.
s Sunset staff analysis of air emissions upsets found that approximately 25 percent of all unplanned air emissions occur on weekends.
6 Letter from Paul Sarahan, Acting Director, Texas Natural Resource Conservation Commission, Litigation Support Division, to Amy Johnson, July 10, 1998.
7 Interview with Austin County Judge Carolyn Bilski, Sealy, Texas, December 15, 1999; Interview with staff of City of Dallas Environmental and Health Services, Air Pollution Control, Public Works and Transportation, and Dallas City Attorney's Office, Dallas, Texas, February 15, 2000; Telephone interview with Cathy Sisk, Bureau Chief, Environmental and Community Protection, Office of Harris County Attorney, Houston, Texas, April 28, 2000.
${ }^{8}$ Texas Natural Resource Conservation Commission Agenda Meeting, March 8, 2000, Austin, Texas, testimony of Reverend Gene Collins.
${ }^{9}$ Texas Natural Resource Conservation Commission Agenda Meeting, March 8, 2000, Austin, Texas.
${ }^{10}$ Agency staff were able to produce data from the Commission's predecessor agency, the Texas Water Commission, indicating that the number of water related complaints rose from 1,475 complaints in Fiscal Year 1987 to 3,979 complaints in Fiscal Year 1992, as reported in Texas Water Commission, Waterfront (Spring 1993).
${ }^{11}$ Sunset staff reviewed all complaints received by Priority for fiscal years 1995 through 1999. "Low priority" means the complaint was assigned either Priority four, which are investigated when resources are available or as schedules allow, or Priority five, which are no longer investigated.
${ }^{12}$ Texas Water Code Ann., ch. 7, sec. 7.075.
${ }^{13}$ Texas Water Code Ann., ch. 7, sec. 7.058.
${ }^{14}$ Agreed Order Docket No. 1998-0504-MLM-E, adopted by the Commission on March 8, 2000.
${ }^{15}$ Texas Water Code Ann., ch. 7, sec. 7.053, lists factors to be considered in determination of penalty amount, including the amount necessary to deter future violations and any other matters that justice may require.

## Issue 10

## TNRCC's Funding Structure Does Not Appropriately Support the Agency's Activities.

## Summary

## Key Recommendations

- Authorize TNRCC to expend a percentage of fee revenues to expand innovative regulatory programs and fund multi-media activities.
- Reauthorize the continuation of the Petroleum Storage Tank Remediation fee, at a lower level, to pay for petroleum storage regulations.
- Limit the fee payment reporting methods available to Solid Waste Disposal fee payers.
- Consider other options to improve the stability, equity, and simplicity of TNRCC's fee revenue collections.


## Key Findings

- TNRCC's funding structure lacks flexibility to expand innovative services that benefit the regulated community, stability to adequately fund required regulatory programs, and the ability to provide equity in fee costs among all payers.
- TNRCC's administrative costs could be reduced by simplifying its complex fee structure.


## Conclusion

The State relies on TNRCC, and the fee system it administers, to support regulatory activities that protect the environment. The agency needs a high quality revenue system that is stable, equitable, accountable, fairly administered, and flexible to help accommodate innovative regulatory approaches. These recommendations will help ensure the State can provide a broader range of innovative programs that benefit the State by improving protection of the environment, and benefit the regulated community by lowering the costs of compliance. In addition, these recommendations will allow the State to continue administering needed regulatory programs by stabilizing furure revenues. Sunset staff has identified options for the Legislature to consider that could help ensure the fee system is more equitable between payers, help improve administrative efficiencies, and as discussed in Issue 11 , improve accountability in the fee system.

## Support

Current Situation: TNRCC's funding structure, with fees as the major source of revenues, has been of continued interest to the Legislature.

- In fiscal year 1999, TNRCC collected $\$ 345.4$ million in fees from the regulated community and public. The agency administers 84 fees and the chart, TNRCC Fee Revenues Collected, shows the major fees that fund the agency. For fiscal year 1999, the Legislature appropriated $\$ 282.4$ million in fees for TNRCC's operating budget, which are deposited to individual accounts that the agency uses to fund regulatory activities. For more information on these accounts, fees, and fee supported activities, see Appendix D.

TNRCC Fee Revenues Collected FY 1999


- Virtually all of TNRCC fees are dedicated fees, restricted by statute to support regulatory functions relating directly to the payers. For example, wastewater treatment plants pay an inspection fee reserved
only for agency activities, such as permitting and inspecting these facilities. The motor vehicle inspection fee, paid by the public, is restricted to air regulatory activities. Federal restrictions on the uses of fees include the industrial air emissions fee, which is dedicated to operating permits under Title V of the Federal Clean Air Act.
Statutes restrict almost all of TNRCC's fees to supporting just those activities directly related to the payers.
- The Legislature has shown a continuing interest in studying TNRCC's funding structure. In 1996, a joint House Committee focused on funding for water programs, municipal solid waste, Superfund, and simplifying the funding structure. ${ }^{1}$ In 1997, the Senate Finance Committee focused on water program funding. ${ }^{2}$ In 1998, a legislative staff workgroup discussed improving the funding structure by making
it more stable, equitable, flexible, and less complex. ${ }^{3}$ These criteria are reflected in the text box, Principles of a High Quality Revenue System.

Problem: TNRCC's funding structure does not provide flexibility to adequately support services to benefit the regulated community.

- The agency's dedicated fee system evolved before TNRCC's predecessor agencies were combined into the current agency. Each separate agency for air, water, and waste, developed highly specific dedicated fees, and the resulting structure has not been revised since the merger.


## Principles of a High Quality Revenue System

A high quality revenue system has several features, including:

- producing reliable revenues,
- balancing a variety of sources,
- treating payers equitably,
- being easy to understand,
- minimizing the costs of compliance, and
- being fairly and efficiently administered.

Source: National Conference of State Legislatures, Principles of a High Quality State Revenue System, (November, 1992). p. 5. Imposing the old fee structure on the new agency does not provide the flexibility to address regulatory issues that affect all payers across air, water, and waste programs.

- The current fee structure supports traditional command and control regulatory tools, such as inspections and enforcement. However, these processes only ensure compliance with regulatory requirements, and do not encourage the regulated community to exceed these minimum expectations. TNRCC offers alternatives to traditional regulatory tools, including regulatory flexibility, supplemental environmental projects, and flexible permits, but it does not adequately promote them, partly because of the cost to adequately oversee and administer these efforts. As a result, fee payers are not maximizing the benefits these programs offer, such as lowering the costs of environmental compliance. More information on innovative regulatory programs can be found in Issue 3 of this report.
- The lack of flexibility in the fee structure restricts TNRCC's ability to support numerous services and programs which would benefit the State and the regulated community. Without a revenue stream to pay for initiatives that fall outside the narrow scope of most fees, the agency misses the opportunity to address vital agency needs, including:
- compliance assistance and pollution prevention services,
- multi-media activities, such as inspections and monitoring, and
- scientific environmental research.

Problem: TNRCC's funding structure does not have the stability to adequately support required programs in the future.

- Significant sources of the agency's revenues are diminishing or are scheduled to disappear altogether. However, the agency's responsibilities are not expected to diminish or disappear at the same time. The following examples illustrate the agency's difficulties in

The lack of flexibility in its fee structure limits TNRCC's ability to support programs that would have a general benefit to the State and regulated community.

> While the collection of the PST remediation fee will soon cease, the need for remediation and emergency response will continue.

| State Lead PST Program Expenditures FY 1999 |  |  |
| :---: | :---: | :---: |
| Funding Source | Fee Status | Dollar Amount |
| PSTR Fee | Fee to be eliminated | \$6,000,000 |
| UST/AST Fees | Declining | \$540,000 |
| Federal Funds | Stable | \$264,000 |
| TOTAL |  | \$6,804,000 |

trying to meet its regulatory responsibilities with fees that do not reliably support its needs.

## State Lead Petroleum Storage Tank (PST) Program

The federally required State Lead PST program has two components, reimbursement of remediation contractors and the regulation of aboveground and underground petroleum storage tanks. The State's response exceeds federal requirements by collecting the PST Remediation fee for the reimbursement of PST

## Petroleum Storage Tank Remediation Fee Key Facts - FY 1999

- $\$ 157.7 \mathrm{M}$ in revenues
- Fee is collected by the Comptroller
- Fee collection ends March 2002
- TNRCC cannot spend funds after September 1, 2003
- Rate: \$19 to \$75 per delivery, with an average of $\$ .09$ per gallon remediation contractors. This fee, which expires in March 2002, is described in the text box, Petroleum Storage Tank Remediation Fee, Key Facts. While collection of the remediation fee will cease, as well as state remediation efforts, the State has a continuing need to regulate above and underground storage tanks, and it has continuing remediation and emergency response needs beyond those funded by the remediation fee.

TNRCC has identified a continuing need for the State to fund the remediation, registration, and regulation of PSTs, at a cost of $\$ 33.3$ million annually. ${ }^{4}$ A portion of these costs, $\$ 24$ million annually, is for conducting corrective actions at more than 400 sites with no identified responsible party. In addition, TNRCC estimates that an additional 2,000 abandoned sites in the state could require remediation at a cost of $\$ 114$ million above annual program costs.

Because funding sources for the program are expiring and declining, the State may have difficulty continuing the State Lead PST program estimated to require about $\$ 7$ million annually. The chart, State Lead PST Program Expenditures, shows the program's funding sources, most of which comes from the soon-to-expire remediation fee. Another funding mechanism, the Underground Storage Tank registration fee, has decreased by fifty percent since fiscal year 1990, due to a drop in the number of statewide registered tanks. The chart, Underground Storage Tank Registration Fee Revenue, shows the decline in revenue.

## Air Program

Air program funding comes from the Clean Air Account, which is supported by seven different fees. The emissions fee provides 48 percent of program funding in the account. A brief description of this fee is provided in the text box, Air Emissions Fee, Key Facts. One company can have several accounts - individual facilities or point sources -

Underground Storage Tank Registration Fee Revenue Fiscal Years 1990-2000
 upon which they pay a fee. The fee is limited to companies emitting state regulated pollutants, and any of six criteria pollutants regulated by EPA. Federal requirements are for the State to

## Air Emissions Fee Key Facts - FY 1999

- $\$ 38 \mathrm{M}$ in revenues
- 2,161 fee payers
- Revenues are declining
- Rate: $\$ 26 /$ ton with a 4,000 ton cap

The air emissions fee recovers the costs of regulation under Title V of the Federal Clean Air Act, and is dedicated to permitting activities.
collect the equivalent of $\$ 25$ per ton of emissions, with no charge on carbon monoxide, and to adjust the rate for inflation. Texas' rate structure charges \$26 per ton, up to a 4,000 ton limit per account. Failing to meet EPA requirements could result in Texas having to demonstrate that the fee structure can support Title V activities.

Since the fee is based on air emissions which are declining, revenues are projected to decline by $\$ 5.2$ million by fiscal year 2003. The chart, Air Emissions Fee Revenue, shows the projected decline from fiscal years 1996 to 2003. TNRCC estimates that the cost of air regulatory activities will not decline from fiscal year 2001 forward, resulting in a $\$ 3.2$ million shortfall in the Clean Air Account by fiscal year 2003. ${ }^{5}$

The air inspection fee, another source of funding for air programs, is described in the text box, Air Inspection Fee, Key Facts. Originally, this fee was a broad-based, stable revenue source for Texas' air programs


## Air Inspection Fee Key Facts - FY 1999

- $\$ 5 \mathrm{M}$ in revenues
- $6 \%$ of division funding
- 1,638 fee payers
- Revenues are declining
- Rate: $\$ 25$ to $\$ 75,000$

The inspection fee recovers the cost of inspection and enforcement activities. The fee varies based upon the type of business paying.
until the emissions fee and rates replaced it as the major source of air program funding. Approximately 75 types of businesses are subject to the inspection fee, and no new businesses have been added to the base of fee payers since 1987. In addition, the inspection fee has not been adjusted for inflation since fiscal year 1992.
Problem: TNRCC's fees are not uniformly distributed among the regulated community.

- TNRCC's fee structure does not equitably distribute costs of programs among those regulated by, or benefitting from, the agency's activities. Inequities may be caused by fees being calculated on the basis of volumes emitted, discharged, or consumed. Inequities may also be caused by caps that allow consumption or emissions above the cap to be exempted from fees. These caps may, in fact, have the unintended effects of subsidizing undesirable behavior such as the wasteful consumption of natural resources or the emission of greater volumes of pollutants into the environment.

The following material provides examples of inequities in the agency's fee structure.

## Air Emissions Fee

The air emissions fee is statutorily capped at 4,000 tons per year: Industries that emit more than the cap do not pay on pollution emitted over the cap, effectively reducing their per-

| Average Air Pollutant Emissions <br> Fee Rates by Ton <br> FY 1999 |  |  |
| :--- | :---: | :---: |
| Tons of <br> Emissions | Number of <br> Accounts | Average Dollar <br> Per Ton Cost |
| Over 100,000 | 4 | $\$ 3$ or less |
| 50,000 to 100,000 | 5 | $\$ 3.50$ |
| 10,000 to 50,000 | 35 | $\$ 7.70$ |
| 4,000 to 10,000 | 19 | $\$ 11.80$ |
| Under 4,000 | 1,085 | $\$ 26.00$ | ton costs. The chart, Average Air Pollutant Emissions Fee Rates by Ton, shows the average rates per ton of pollutants paid by accounts ranked by tons of emissions. The average cost per ton of air pollution varies from $\$ 3$ to $\$ 26$. ${ }^{6}$

## Wastewater Discharge Fee

The wastewater discharge fee is based on the discharge volume and the potential impact to the environment. The annual fee is capped at $\$ 11,000$ for municipalities, and $\$ 25,000$ for industrial sources. The average wastewater discharge costs per 1,000 gallons ranges from $\$ 1.65$ for small treatment plants to $\$ 0.90$ cents for large treatment plants, or 45 percent less. The chart, Municipal and Industrial Wastewater Permits Subject to Fees, shows the wide range of rates per 1,000 gallons paid by facilities. ${ }^{8}$
Large municipalities can have several permitted facilities consolidated into large treatment plants with a high combined discharge capacity. Depending on the number of permits held by a large municipality,

| Municipal and Industrial Wastewater Permits Subject to Fees ${ }^{9}$ FY 1999 |  |  |
| :---: | :---: | :---: |
| Discharge Rate (Million Gallons Per Day) | Average Rate Per 1000 Gallons | Number of Permits |
| $\begin{aligned} & 250,000 \text { gallons } \\ & \text { a day or less } \end{aligned}$ | \$1.65 | 1,074-Municipal <br> 150 - Industrial |
| 2 MGD | \$0.50 | 560 - Municipal <br> 69 - Industrial |
| 4 MGD | \$0.50 | 100 - Municipal <br> 34 - Industrial |
| 6 MGD | \$0.60 | 47 - Municipal <br> 13 - Industrial |
| 6 MGD or more | \$0.90 or less | 89 - Municipal 76 - Industrial |

wastewater fees can average less than $\$ 200$ per million gallons per day of discharge capacity, while small towns would pay over $\$ 2,500$ in one permit for the same volume of discharge capacity. ${ }^{10}$

## Public Water System Fee

The public water system fee has wide variations in the average cost per connection between large and small systems. For example, a water system with 100,000 connections pays $\$ 17,000$ annually. By comparison, a water system with 1,000 connections pays $\$ 840$ annually. Both systems consume the same amount of water per connection a day, yet the larger system pays only 0.17 cents per connection while the small system pays $\$ 1.90$, or over 10 times more per connection. The chart, Public Water System Fees,

| Public Water System Fees <br> FY 2000 |  |  |
| :--- | :---: | :---: |
| Number of Water <br> Connections | Rate Per <br> Connection | Number of <br> Systems |
| 500,000 or more | $\$ 0.09$ | 1 |
| 250,000 to 500,000 | $\$ 0.12$ | 3 |
| 100,000 to 250,000 | $\$ 0.17$ | 2 |
| 10,000 to 100,000 | $\$ 0.37$ | 81 |
| 1,000 to 10,000 | $\$ 0.84$ | 742 |
| Less than 1,000 | $\$ 1.90$ | 5,838 | shows that the effective rates range from 9 cents to over $\$ 1.90$ per connection. ${ }^{11}$

Opportunity: TNRCC's administrative costs could be reduced by simplifying its funding structure.

- TNRCC administers several fees that generate low amounts of revenues compared to the number of payers. Because these fees generally have the same payers within each media, they require multiple payments to the agency, and force the agency to expend additional resources to process and credit the payments. In addition, some fees have complex reporting options that can result in the underpayment of fees.

The following examples show the difficulty the agency has administering some of these fees.

## Underground Storage Tank Registration Fee Key Facts - FY 1999

- $\$ 3.1 \mathrm{M}$ in revenues
- 34,000 payers
- $50 \%$ decline in revenues since 1990
- Rate: $\$ 50$ per tank, annually
- Covers the costs of registration and regulation


## Underground Storage Tank Fee

The underground storage tank fee has had a history of administrative difficulties since its inception in 1987. The fee is described in the text box, Underground Storage Tank Registration Fee, Key Facts. Factors contributing to its high administrative costs include the difficulty in locating its 34,000 payers, enforcing payment, and ultimately collecting the $\$ 3.3$ million in cumulative uncollected revenues and associated penalties. ${ }^{13}$ In addition, the fee requires a large investment in information systems resources such as data entry, fee calculations, and updating of payer information. ${ }^{14}$ The fee is also declining due to consolidation of tank owners, older tanks being taken from service, and the installation of new larger tanks that hold multiple grades of fuel.

Solid Waste Disposal Fee Key Facts - FY 1999

- $\$ 31.1 \mathrm{M}$ in revenues
- 180 fee payers

Rates:

- $\$ 1.25 /$ ton by weight
- $\$ 0.40 /$ cubic yard compacted
- \$0.25/cubic yard uncompacted

Fee rate pariables include:

- Compacted Tons
- Uncompacted Tons
- Compacted cubic Yards
- Uncompacted cubic Yards
- Population Equivalent Tons

The Solid Waste Disposal fee is paid by private and public solid waste landfill facilities. The fee recovers the costs of regulating non-hazardous municipal waste, including inspections and permitting.

## Solid Waste Disposal Fee

The solid waste disposal fee has a complex set of calculations that creates administrative and audit difficulties for the agency. For a description of the fee, see the text box Solid Waste Disposal Fee, Key Facts. Fee payers may calculate payments using five different rate variables in different combinations. Most payers use a combination of one to two rate variables, while 27 of 180 payers still use a combination of three different rate types. Fee payers can use any combination of these calculations every three months, resulting in 14 possible combinations to use when recording data and calculating fees. ${ }^{15}$ While these different calculations may be necessary because of different forms of waste delivery, and different measurement methods such as using scales, facilities do not have to use several different calculations quarterly. These complex fee calculations contribute to a high rate of fee adjustments, more than any other fee, in excess of $\$ 1$ million in fiscal year 1999. ${ }^{16}$ TNRCC fee auditors have ranked these fee
revenues at high risk of being mis-reported due to the system's complexity, and being a self-reported fee. ${ }^{17}$

## Miscellaneous Fees

TNRCC has several fees with large numbers of payers and relatively small amounts of revenues. The five fees listed in the chart, TNRCC Fees with Low Revenues, shows fees administered by the agency which bring in just over $\$ 700,000$ per year, but must be collected from over 10,000 fee payers. The costs the agency expends to collect, process, and track these revenues may not be cost effective compared to other fee options for these programs.

| TNRCC Fees with Low Revenues <br> FY 1999 |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Fee Type | Purpose of Fee | Number <br> of Payers | Annual <br> Revenues |  |  |  |
| Air Permit Renewals | Air permitring activities | 107 | $\$ 269,000$ |  |  |  |
| Toxic Release Inventory (TRI) Reporting | Registering TRI releases | 1,100 | $\$ 87,000$ |  |  |  |
| Above Ground Petroleum Storage <br> Tanks (ASTs) | Registering ASTs | 8,841 | $\$ 360,000$ |  |  |  |
| Solid Waste Permitting | Solid waste permitting <br> activities | 61 | $\$ 5,000$ |  |  |  |
| TOTAL |  |  |  |  | 10,109 | $\$ 721,000$ |

## Recommendation

## Change in Statute

### 10.1 Authorize TNRCC to reserve a percentage of fee revenues to provide for the expansion of compliance assistance, multi-media activities, research, and innovative regulatory programs.

This recommendation would allow the Legislature to set aside 5 to 10 percent of fee revenues to expand innovative regulatory programs, multi-media activities, and efforts such as research that support environmental regulation. The actual percentage would be set by the Legislature each biennium, by rider, in the appropriations process. The 5 to 10 percent range is less than the 25 percent transferability allowed other state agencies, but would provide significant dollars for this purpose. Based on approximately $\$ 300$ million in annual fee revenues, the Legislature could reserve $\$ 15$ million to $\$ 30$ million in a dedicated account to be expended solely for the purpose of expanding services that provide
benefits across the regulated community, including activities across media that the agency has begun implementing, such as multi-media inspections. This amount would vary as fee revenues change, and could range as low as approximately $\$ 7$ million to $\$ 15$ million when the PSTR fee expires in March 2002. The authorization to pool a percentage of fee revenues would supercede all current statutes that dedicate individual fees to specific purposes.

TNRCC would remain accountable for ensuring these funds were expended only on compliance assistance services, pollution control programs, scientific research, and other innovative regulatory tools. TNRCC would be required to report to the Legislature on an annual basis to account for these funds and demonstrate the effectiveness of using these funds for innovative regulatory programs.

### 10.2 Reauthorize the continuation of the Petroleum Storage Tank Remediation fee, at a lower level, to pay for petroleum storage regulations.

This recommendation would continue the collection of the Petroleum Storage Tank Remediation fee beyond its currently scheduled March 2002 expiration date, and expand its use for petroleum storage tank regulations. This fee is based on bulk delivery of regulated substances, such as fuel, to storage tanks and is currently collected at a rate of 9 cents per gallon, producing almost $\$ 157$ million in annual revenue. The fee would be set at a level to ensure that the State can meet the continuing need for above and underground petroleum storage tank regulation, and the additional costs of corrective actions over a five-year period.

The fee would be renamed the Petroleum Storage Tank fee, and be collected at a rate to bring in $\$ 34$ million annually for the next five years, a reduction of $\$ 122$ million from current annual collections. To accomplish this rate of collection, the Legislature would set the fee rate at approximately 2 cents, down from the 9 cents per gallon, currently in statute.

This $\$ 34$ million annual collection would support three basic activities related to petroleum storage tanks. First, it would provide almost $\$ 7$ million annually to support the State Lead Petroleum Storage Tank program required by the federal government. Second, it would provide $\$ 24$ million to support remediation of abandoned sites and sites with no identified responsible party. After five years, when existing remediation needs have been addressed, the fee could be reduced still further - to a level of $\$ 10$ million annually - to cover just the continuing costs of regulation. The third activity supported by this expanded fee is to provide $\$ 3$ million to cover the cost of regulating underground storage tanks. The separate Underground Storage Tank fee, which brought in about $\$ 3$ million in 1999 to pay for these regulations, would be abolished.

The Comptroller of Public Accounts currently has a cost effective method of collecting these funds and would continue to do so. Because the Petroleum Storage Tank fee is based on the delivery of fuel and other regulated substances to storage tanks, and deliveries can only be made to tanks that are registered with the State, the fee would be appropriately assessed on payers who are required to register.

### 10.3 Require Solid Waste Disposal fee payers to select no more than two reporting methods for calculating fee revenues paid to the State.

This recommendation would require the owners of solid waste disposal facilities to choose a more limited set of waste disposal reporting calculations for a period of one year, or four quarterly reporting periods. This recommendation does not change the current reporting calculations existing in law, and allows payers to choose from the full range every year. Payers who cannot meet this requirement would be allowed to use up to one additional reporting calculation method, with agency approval.

## Funding Alternatives

The Legislature could consider the following options for further revising TNRCC's funding structure. The review identified several other options that would address problems with the agency's funding structure. The staff chose not to offer these as recommendations, but felt that their discussion would allow a more comprehensive look at what the Legislature could consider.

## Statutory Alternatives

### 10.4 Adjust the Air Inspection fee for inflation and modify the fee to provide a stable base of funding to supplement declining Air Emissions fees.

This change would require adjusting the fee for inflation, using a 3 percent inflation rate for the last eight years would provide an additional $\$ 1$ million in revenues.

In addition to modifying the fee for inflation, this alternative could also modify the fee in one or more of the following ways:

- adjust the rate,
- expand the types of businesses covered under the fee to include approximately 20 new types of business,
- require all requlated air accounts to to pay the inspection fee, or
- authorize the fee to be used for Title V activities.

The amount of revenues generated could be significant, ranging from approximately $\$ 10$ million to $\$ 30$ million annually. By increasing the role of the inspections fee as a funding mechanism, the State could help to stabilize air program revenues to ensure the State can meet the continuing need to regulate air emissions, and meet federal clean air requirements.

### 10.5 Adjust the Air Emissions fee for inflation and modify the fee to more equitably distribute costs between large and small payers.

This change would require adjusting the fee for inflation. For example, by adding $\$ 1$ to the current rate of $\$ 26$ per ton, an additional $\$ 1.1$ million in annual revenues could be raised.

In addition to modifying the fee for inflation, this alternative could also modify the fee in one or more of the following ways:

- raise the 4,000 ton cap on the Air Emission fee,
- add a surcharge to emissions above the current cap, or
- remove the cap and create a progressive fee rate per ton of emissions.

The revenues generated could be significant depending on implementation. Currently 1.1 million tons of emissions above the cap are not subject to the fee. Adding a surcharge of $\$ 2$ per ton above the cap would raise an additional $\$ 2.2$ million per year. The State could recover the $\$ 3.2$ million projected
air program funding shortfall by adjusting the emissions fee for inflation and adding the surcharge for every ton above the cap, for a total of $\$ 3.3$ million in revenues each year.

Other changes such as adjusting the cap upwards, or removing the cap, would also raise greater revenues. These changes would allow the agency to distribute the costs of regulation more equitably between large and small fee payers, and stabilize funding for the near future.

### 10.6 Modify the Wastewater Treatment Inspection and Public Water System fees to more equitably distribute costs between large and small payers.

This recommendation would redistribute the costs of regulation more equitably between small and large fee payers for the wastewater treatment inspection fee and the public water system fee. The Legislature would have to determine the level of modification to the rates within each fee. For example, the rate per-connection for public water systems could be adjusted so that systems with over 100,000 connections paid an annual surcharge, in combination with lowering the rates for smaller systems.

In the case of wastewater treatment facilities, those facilities at the fee cap could pay an annual surcharge, in combination with lowering the rates for facilities below the cap. As another alternative, regulated entities such as large municipalities holding more than one permit, could pay a surcharge for each additional permit, in combination with lowering the rates for facilities holding one permit.

### 10.7 Eliminate the following fees - Air Permit Renewals, Toxic Release Inventory Reporting, Above Ground Petroleum Storage Tank, and Solid Waste Permitting.

This recommendation would require the Legislature to adjust the rates, or add a minor surcharge, in each media - air, water, and waste, to recover approximately $\$ 750,000$ in revenues. Current regulation would continue, but the administrative costs associated with collecting the fees would be eliminated.

## Impact

The State relies on the TNRCC, and the fee system it administers, to support environmental protection functions. The State should have a high quality revenue system that is stable, equitable, accountable, fairly administered; and has the flexibility to accommodate innovative programs, and provide more services that benefit the regulated community. These recommendations will help ensure the State can support a broader range of activities that benefit all fee payers. In addition, these recommendations will allow the State to continue administering needed regulatory programs. These recommendations will help stabilize future revenues, improve administrative efficiencies, and improve accountability in the system. Sunset staff has identified options for the Legislature to consider which could help ensure the fee system is equitable between fee payers, and adequately supports future regulation.

## Fiscal Implication

These recommendations do not require fees be raised, but revenues could increase, depending on fee levels decided upon by the Legislature. The agency could have administrative savings, particularly from eliminating the current collection and administration of the UST fee, and replacing this with a continued PST fee; and streamlining the fee structure. These savings could not be estimated for this
report. These recommendations can be implemented with existing agency resources. The identified funding options could have a significant fiscal impact, depending on whether the Legislature makes any changes, and the extent of those changes.

The funding alternatives in this Issue could also be used to fund increased research efforts, as discussed in Issue 6. The Legislature would need to determine the actual amount of money that should be dedicated to increased environmental research.

[^7]
## Issue 11

## TNRCC's Fee Structure Lacks Accountability and Limits the Revenues the Agency is Able to Collect.

## Summary

## Key Recommendations

- Require the submission of all fees on the date payment is due.
- Require fee credits or refunds exceeding $\$ 5,000$ to be approved by fee audit staff.
- Provide fee audit staff authority to issue notice of violations to fee payers, and provide the agency authority to charge standard interest and penalties on all delinquent fees.
- Allow TNRCC's Executive Director to modify penalty and interest amounts only upon good cause and with written explanation.


## Key Findings

- TNRCC's fee collection system lacks accountability to ensure that fees are being properly paid.
- TNRCC assumes administrative costs to adjust fees for payers, which limits the agency's ability to ensure all fees are being paid.
- TNRCC does not consistently apply existing penalty and interest authority to all entities making late payments.


## Conclusion

TNRCC has not fully integrated all fee payers into a system that holds them equally accountable for making accurate and timely payments to the agency. Currently, some fee payers are paying penalties for not submitting fees on time, while others do so without being sanctioned. Major TNRCC fees are managed under a self-report system that creates risks that the agency will not recover all fees that payers must pay as a condition of having a permit to operate. Strengthening TNRCC's revenue management by improving fee payer accountability would enable the agency to collect a greater percentage of fees on a more timely basis, and give payers better incentives to ensure that reporting data and fee calculations are accurate. The recommendations will generate additional revenues of $\$ 3.5$ million over five years.

## Support

Current Situation: TNRCC's funding strongly relies on fee revenues, which the agency collects and manages with different payment mechanisms.

- TNRCC collects over 84 fees related to waste, air, and water programs that provide approximately $\$ 283$ million, or over 82 percent, of agency's budget in fiscal year 2000. The petroleum storage tank remediation fee, $\$ 157.7$ million in revenues, is collected by the Comptroller's Office and is excluded from the following discussion. Major fees collected and administered by TNRCC for fiscal year 1999 include:
- Industrial Air Emissions and Inspections, $\$ 43$ million;
- Solid Waste Disposal, $\$ 31$ million;
- Hazardous Waste Management, Generation, and Facility, \$19.2 million; and
- Wastewater Treatment, Public Water Supply, and Water Quality Assessment, $\$ 19$ million.

Under a self report/ self pay fee system, the payer calculates the fee and sends the payment to the agency.

- Since the merger of its predecessor agencies, TNRCC has had to manage many fees structured to recover the cost of regulation from the regulated community. TNRCC has three basic types of fees.
- Billed Fees - the agency calculates the fee based on fixed criteria, such as number of underground storage tanks, and bills the payer.
- Self Report/Billed Fees - the payer submits a worksheet, or electronic data, that determines the fee amount based on variables, such as waste volumes managed at a facility. TNRCC uses the submitted information to calculate the fee and sends an invoice to the payer.
- Self Report/Self Pay Fees - the payer calculates the fee, based on variables such as air emissions, and sends payment to the agency.
- TNRCC payment processing has two aspects, receipt of payments, by Financial Administration staff, and adjustment of fees by air, water and waste staff. Payers can request a refund up to four years after paying, and can submit adjustments to reported data within varying time frames depending on the specific fee. ${ }^{1}$ Payers who dispute a fee must submit a claim in writing.
- To ensure appropriate fee payment, the agency has fee auditors and air program staff that share auditing responsibilities. The audit staff
has twelve auditors, six of whom audit reimbursements to petroleum storage tank remediation contractors, a program scheduled to be abolished in 2002. The air program has four auditors. With the elimination of the petroleum storage tank fee, TNRCC will have ten audit staff for all fees.
- Since 1995, TNRCC has had authority to levy penalties and interest for late payments, improving the timeliness of fee payments. In addition, inspection staff in the agency's field operations can issue a notice of violation (NOV) for under-reporting information that results in incorrect fee payments.

Problem: TNRCC's current fee collection system lacks accountability to ensure that fees are being properly paid.

- TNRCC's payment policies result in a fee structure that does not hold all payers to the same level of accountability. The agency applies its authority for late penalties to some payers and not others. In some programs the agency tracks outstanding payers and overdue fee amounts, while other programs do not. For example, air program staff track the number of days each payer is overdue, while some water program staff do not. ${ }^{2}$
- TNRCC's oversight of fee collections is not centralized. Audit functions are split between general fee auditors and air fee auditors. Keeping air fee auditors in the same program that administers and negotiates fees gives the appearance of a potential conflict of interest between oversight and program functions. In addition, the agency manages air fees in isolation from Financial Administration, resulting in one staff person managing over $\$ 43$ million in annual collections. Keeping air fees segregated from Financial Administration databases may place some data at risk of loss. For example, air program staff cannot account for outstanding fees collected or outstanding fee payers for fiscal year 1997, because of data lost when converting to new software. ${ }^{3}$
- Fee auditors do not have statutory authority to ensure enforcement of audit findings. Fee auditors are not authorized to issue NOVs to payers who repeatedly, and intentionally, violate reporting standards. Until March of 2000, inspectors issuing NOV's for misreporting data did not require payers to send corrected data to the agency, resulting in TNRCC not recovering these fees. ${ }^{4}$

Auditors do not have authority to levy penalties and interest on delinquent fees found as a result of an audit. Current penalties apply to late payment of fees, not failure to pay or audit findings. ${ }^{5}$ In one instance, fee auditors attempted to apply $\$ 264,000$ in penalties and interest to over $\$ 1$ million in delinquent fees, but the agency could not collect these penalties due to a lack of authority. ${ }^{6}$ In addition,

TNRCC's oversight of fee payers is inconsistent, assessing late penalties against some payers, but not others.

TNRCC policies create delays in collecting fee revenues.
fee audit policy allows discretion for executive level approval of audit reports, which may compromise auditors' abilities to issue independent findings, and possibly prevent the agency from collecting delinquent revenues. ${ }^{7}$

Problem: TNRCC is assuming administrative costs to manage revenues affecting its ability to collect revenues from payers.

- While self-reported fees can produce some administrative savings because payers are responsible for sending in payments, TNRCC still assumes costs due to the risks of selfreport fee systems. The chart, Risks of Self-Report Fees, shows some of the risks contributing to increased costs.
- Agency policies, such as not requiring disputed fees to be paid on time and in full, create delays in collecting revenues. Payers can delay payments by asserting that fee calculations are wrong, interpreting rules differently, or


## Risks of Self-Report Fees

- Not knowing the entire universe of fee payers because payers only remit payment if they determine it is due.
- Inability to calculate the amount of fees due annually because no fee is due unless a payer determines so. The agency can only make projections on potential fees due.
- Relying on agency staff to correct mistakes made by fee payers, and to conduct audits to ensure payment amounts are correct. claiming that reporting requirements have changed. When payers send in lower payments than assessed by the agency, TNRCC must re-verify the original amounts due and request the balance from the payer, if required. TNRCC's fiscal year 1997 revenue policy stated the agency would revisit the policy of not requiring timely payment of disputed fees in the future, but has not yet done so. ${ }^{8}$
- In fiscal year 1999, TNRCC incurred the costs of adjusting over $\$ 4.5$ million in self-reported payments. ${ }^{9}$ Many fee refund documents show payers requesting adjustments due to their own errors, including:
- incorrect application of fee exemptions,
- reporting wrong fee calculation data,
- overpayment due to wrong data,
- repeatedly sending in fees that are not required,
- sending in fees at the wrong time of the year, and
- sending in duplicate fee payments. ${ }^{10}$
- Agency policies and practices regarding the amount of time a payer has to submit revisions to reporting data varies from no time limit for hazardous waste fees, one year for sludge fees, and four years for solid waste fees. ${ }^{11}$ While payers generally have from four years in which to request refunds for fee disputes, these policies instead allow payers to receive credits for future payments almost indefinitely, thus escaping the four-year limit imposed on refunds.


## Result: TNRCC is not collecting all authorized revenues from fee payers.

- TNRCC has a cumulative balance of approximately $\$ 9$ million in potentially collectable outstanding fees for fiscal year 1999. ${ }^{12}$ As shown in the chart, TNRCC Major Outstanding Fees, in fiscal year 1999 the agency assessed approximately $\$ 800,000$ in late fees and interest, and collected less than $\$ 400,000 .{ }^{13}$ While outstanding revenues do include amounts owed by bankrupt or foreclosed businesses, the agency has not fully accounted for what percentage of the $\$ 9$ million is actually collectible. ${ }^{14}$ Current outstanding fees do not include additional revenues lost due to payers not reporting as required or not found responsible by TNRCC for fees due in previous years.
- TNRCC does not have information showing overdue fee amounts, numbers of late payers, or penalties assessed on fiscal year 1999 fees paid past the deadline for the following three fees:
- Hazardous Waste Management, \$13.5 M;
- Class 1 Commercial Waste Management, $\$ 2.1$ M; and
- Water Utility Regulatory Assessment, $\$ 1.8$ M.

These fees total $\$ 17.4$ million in revenues and are at-risk of late payment to the agency. TNRCC does not use existing authority to charge late fee penalties to these payers to encourage prompt and accurate payment.

- TNRCC audits have identified Hazardous Waste Management fees as suffering from lack of agency oversight and being at-risk for underpayment. A 1995 TNRCC audit found $\$ 2.3$ million in potential underpayments by hazardous waste payers, yet in 1996 the agency collected none of these delinquent fees. ${ }^{15}$ In fact, rather than collect delinquent fees, TNRCC refunded over $\$ 2$ million in fee payments just before the cut-off date of four years, dating back to $1993 .{ }^{16}$

TNRCC has not made equal efforts to identify delinquent payers

TNRCC has not used its authority to fine late payers of three major fees that produce annual revenues of more than $\$ 17.4$ million.
and hold them accountable, as they have in giving refunds. The chart, Hazardous Waste Management Fee, shows trend information on fees refunded and owed to the agency. For example, in fiscal year 1999 TNRCC continued to refund fees billed in fiscal year 1993, after the four year limitation on adjustments expired.

| Hazardous Waste Management Fee |  |  |  |
| :---: | :---: | :---: | :---: |
| Fiscal <br> Year | Total Fee <br> Revenue | Fees Refunded <br> to Payers | Owed Fees <br> Paid to Agency |
| 1995 | $\$ 13,284,426$ | $\$ 178,486$ | $\$ 25,387$ |
| 1996 | $\$ 12,264,616$ | $\$ 36,167$ | $\$ 0$ |
| 1997 | $\$ 13,471,512$ | $\$ 2,005,320$ | $\$ 35,712$ |
| 1998 | $\$ 12,867,245$ | $\$ 0$ | $\$ 0$ |
| 1999 | $\$ 13,552,602$ | $\$ 79,586$ | $\$ 1,908$ |

## Recommendation

## Change in Statute

### 11.1 Require payers to submit all fees on the date payment is due.

This recommendation would require payment of all fees by the due date, whether they are billed or self pay. Under this change, a fee may not be adjusted or disputed until the fee in question is paid in full to the agency.

### 11.2 Allow the agency to accept revisions to self-reported fee data for only up to one year after the fee is paid in full.

Agency staff would consider adjustments only after verifying that the fee in question is paid in full, and staff would not accept revised fee data from payers after one year has elapsed from the time the fee is paid. Payers would still be able to request refunds of fees for up to four years as allowed under current law, for example because of agency error in calculating a fee or a payer sending in a duplicate payment. This recommendation would limit the time a payer has to request a credit or refund due to submitting incomplete or erroneous self-reported fee calculation data. This recommendation would also require the agency to notify payers of changes in fee payment procedures.

### 11.3 Require fee credits or refunds exceeding $\$ 5,000$ to be approved by fee audit staff.

This recommendation would require fee staff to forward refund requests to audit staff explaining the basis for a proposed credit or refund for audit approval. Auditors would not be required to investigate the refund, but could confirm that the payer does not have any delinquent debts and track adjustment patterns that may show reporting problems. Approval of refunds would not prevent fee auditors from conducting subsequent audits of those same payers. The $\$ 5,000$ threshold allows the majority of fee
adjustments to be processed under the current system, while ensuring additional oversight for larger refunds.

### 11.4 Authorize fee audit staff to issue a notice of violation to fee payers for willful violation of reporting requirements, and authorize the agency to charge interest and penalties on unpaid fees that are delinquent.

This recommendation grants authority to audit staff that agency inspectors already have to ensure compliance from repeat offenders that continue to violate reporting standards and under pay fees. TNRCC would also be able to apply standard late penalties and interest to all delinquent fee amounts owed to the agency. Penalty and interest revenues would be deposited into the account that the fees are paid.

### 11.5 Authorize the TNRCC Executive Director to modify penalty and interest amounts only upon good cause and with written explanation.

This recommendation would allow the Executive Director discretion in negotiating payment terms for audit findings and associated penalties, but only after providing to audit staff written justification for any modifications to penalty and interest amounts. The Executive Director would not be permitted to modify actual audit findings reported by fee auditors.

## Management Action

### 11.6 TNRCC should integrate major air fees, such as the emissions and inspections fees, into the Accounts Receivables database maintained by the Financial Administration Division.

This recommendation would encourage the transfer of air fee data into the Accounts Receivables database to ensure the data is not subject to accidental loss, that other agency staff can maintain the data, and enable the generation of reports for agency use.

### 11.7 TNRCC should consolidate fee auditors by transferring air fee auditors to the general fee audits section.

This recommendation would encourage the placement of air fee auditors in the fee audit section, removing the potential appearance of a conflict of interest from housing air fee auditors in the same program that administers the fee.
11.8 TNRCC should make efforts to track delinquent payers and apply late payment penalties and interest to Hazardous Waste Management, Class 1 Commercial Waste Management, and Water Utility Regulatory Assessment payers.

This recommendation would encourage the agency to apply late payment penalties and interest to all payers in a uniform manner, and the agency should ensure that fee staff have training and procedures in place to implement the recommendation.

## Impact

TNRCC's ability to carry out its mission depends on collecting the revenues that fund the agency's regulatory activities. The importance of these revenues requires the agency to exercise diligence in ensuring full and prompt payment from all payers. These recommendations should improve TNRCC's revenue management by strengthening accountability in fee payment requirements and improving the enforcement of fee audit findings. TNRCC would collect a greater percentage of fees on a more timely basis. Payers would have better incentives to ensure that reporting data and fee calculations are accurate because requests for fee adjustments could only be made within one year on fees that are fully paid on the due date, and large refunds would require fee auditor approval to ensure proper methods for calculating adjustments are followed.

## Fiscal Implication

Overall, these recommendations will have a positive fiscal impact for the State of over $\$ 3.5$ million during a five year period. Based on a collection rate of approximately 90 percent of late fee penalties and interest by air program staff, the agency could collect an additional $\$ 300,000$ per year on penalties and interest already assessed against payers.
In addition, air fee data from fiscal year 1996 shows that approximately 50 percent of air fees were one month late before air staff applied late fee penalties and interest. Assuming a similar rate of delinquency for the $\$ 17.4$ million in fee revenues that the agency has not applied late fees to, the agency could collect an additional $\$ 425,000$ in penalties and interest in the first year. The $\$ 425,000$ figure is based upon 50 percent of the $\$ 17.4$ million, or $\$ 8.7$ million, being delinquent at least 30 days, and subject to a 5 percent penalty. The fee delinquency estimate is conservative, based on agency studies of fee delinquency indicating 50 percent of some fees being 90 days delinquent. ${ }^{17}$ The $\$ 425,000$ would decrease after the first year as more payers come into compliance, reducing the amount to $\$ 200,000$ each year thereafter.

The agency would also be able to recover penalties and interest on fee audit findings. Fee audit staff has found approximately $\$ 800,000$ in fees owed to the agency per year on average. Assuming that most of these revenues would be delinquent at least one year based upon the time frames that these types of audits follow, a 10 percent penalty for the first 2 months would apply, equaling $\$ 80,000$ per year. An additional 10 percent, from applying 1 percent for the next 10 months would equal $\$ 80,000$ for a total of $\$ 160,000$ in penalties annually.
In summary, the following are included in the fiscal impact chart below, $\$ 300,000$ in additional collections of currently assessed late fee payment penalties, $\$ 425,000$ in additional collections of not currently assessed late fee payment penalties in the first year and $\$ 200,000$ each year thereafter, and $\$ 160,000$ in additional collections of late fee penalty payments on audit findings.

The additional workload for fee audit staff to approve fee refunds would be minimal because most adjustments fall under the $\$ 5,000$ threshold.

| Fiscal <br> Year | Revenue Gain to <br> General Revenue - Dedicated |
| :---: | :---: |
| 2002 | $\$ 885,000$ |
| 2003 | $\$ 660,000$ |
| 2004 | $\$ 660,000$ |
| 2005 | $\$ 660,000$ |
| 2006 | $\$ 660,000$ |

${ }^{1}$ Comptroller of Public Accounts, ch. 403, sec. 403.077 (d). Also, Texas Natural Resource Conservation Commission inter-agency electronic mail, May 10, 1996.
2 Texas Natural Resource Conservation Commission, Technical Analysis Division, Industrial Emissions Assessment Section, "Late Emissions Fees 1999," Austin, Texas. March 13, 2000 (computer printout). Also, telephone interview with Mary Martinez, Administrative Technician, Water Permits and Resource Management Division - Utilities and Districts Section, Texas Natural Resource Conservation Commission, Austin, Texas, March 14, 2000.
${ }^{3}$ Telephone interview with Paul Henry, Manager, Technical Analysis Division, Industrial Emissions Assessment Section, Texas Natural Resource Conservation Commission, Austin, Texas, February 23, 2000.
4 Memorandum from Machelle Pharr, Chief Financial Officer, Texas Natural Resource Conservation Commission, to Jeff Saitas, Executive Director, Texas Natural Resource Conservation Commission, February 25, 2000. Also, memorandum from Lori E. Wooten, Waste Program Liaison, Texas Natural Resource Conservation Commission to Regional Directors, Texas Natural Resource Conservation Commission, March 14, 2000.

5 Texas Health and Safety Code Ann., ch. 341, sec. 341.041.
6 Telephone interview with Belinda Murphy, Audit Manager, Chief Financial Officers Division, Compliance, Evaluation, and Audit Section, Texas Natural Resource Conservation Commission, Austin, Texas, April 7, 2000. Also: Texas Natural Resource Conservation Commission, City of Dallas Municipal Solid Waste Disposal Fees Evaluation Report, Attachment 1, (Austin, Tex., July 1997). p. 2.
7 Texas Natural Resource Conservation Commission, Texas Natural Resource Conservation Commission Compliance, Evaluation, and Audit Section Audit Dispute Resolution Process (Austin, Tex., October 1997). p. 1.
8 Texas Natural Resource Conservation Commission, Revenue Management Handbook (Austin, Tex., May, 1, 1997). p. 31.
9 Texas Natural Resource Conservation Commission, Financial Administration Division, summary document of credits, debts, and refunds provided to Sunset staff March 23, 2000.
${ }^{10}$ Sunset staff analysis of Texas Natural Resource Conservation Commission "Request for Refund" forms and interviews with Texas Natural Resource Conservation Commission fee coordinator staff, February to April 2000.
${ }^{11}$ Texas Natural Resource Conservation Commission, electronic mail from Machelle Pharr, Chief Financial Officer, to Sunset Staff, April 17, 2000.

12 Texas Natural Resource Conservation Commission, Financial Administration Division, "Detailed Aged Accounts Reports" for major fee sources, fiscal years 1996-99, provided to Sunset staff February 2000 (computer printout).

13 Texas Natural Resource Conservation Commission, Financial Administration Division, "Outstanding Fees Summary Charts," for major fee sources, fiscal years 1995-99, provided to Sunset staff March 6, 2000.
${ }^{14}$ Texas Natural Resource Conservation Commission, "Annual Report of Delinquent Obligations," for fiscal years 1998-99. These reports submitted to the Office of the Attorney General show an average of $\$ 657,000$ in fees as being truly uncollectible. Sunset staff has taken the $\$ 657,000$ into consideration when calculating the $\$ 9$ million in potentially collectable fees.
${ }^{15}$ Texas Natural Resource Conservation Commission, Self-Reported Fees: Optimizing Revenues, Collections, and Customer Service, Office of Internal Audit (Austin Tex., December 1995). p. 11.
${ }^{16}$ Texas Natural Resource Conservation Commission, Financial Administration Division, summary document of credits, debts, and refunds provided to Sunset staff March 23, 2000. Also, Texas Natural Resource Conservation Commission, Financial Administration Division, "HWC Debts/Credits" summary document provided to Sunset staff March, 2000.
${ }^{17}$ Texas Natural Resource Conservation Commission, Fee Billing and Collection: A Select Review, Office of Internal Audit (Austin Tex., December 1995). p.1.

## Issue 12

## The Current Regulatory Structure for Low-Level Radioactive Waste Hampers the State's Ability to Administer an Effective Disposal Program.

## Summary

## Key Recommendations

- Transfer all regulatory authority for radioactive waste disposal from TNRCC to the Texas Department of Health, Bureau of Radiation Control.
- Create a new Division in TNRCC charged with the siting and operation of a low-level radioactive waste disposal facility.


## Key Findings

- The Legislature has assigned regulatory responsibilities for radioactive materials to three state agencies and remains involved in determining appropriate authority.
- The current regulatory structure for low-level radioactive waste disposal creates a conflict of interest and unnecessarily separates radioactive material regulation.
- The State may fail to meet obligations under the Texas Low-Level Radioactive Waste Disposal Compact, providing for the management and disposal of low-level waste.


## Conclusion

Having TNRCC serve as both the regulator and operator of a low-level radioactive waste disposal facility creates a conflict of interest. In addition, the separation between regulation of storage and disposal is unnecessary and has contributed to TNRCC's inability to develop the program expertise necessary to carry out regulatory authority for radioactive waste disposal. The Legislature has recently responded to this situation by transferring some authority for regulating disposal from TNRCC back to the Texas Department of Health (TDH), where it originated.

The recommendations would consolidate authority for all radioactive material and waste regulation at TDH. The transfer would also eliminate the conflict of interest that currently exists in TNRCC. Separating regulatory authority from operation would enable the State to move forward in its efforts to provide safe management and disposal of low-level radioactive waste.

## Support

Current Situation: The Legislature has assigned regulatory responsibilities for radioactive materials to three state agencies and remains involved in determining appropriate authority.

- Three state agencies administer regulatory responsibility for radioactive materials and waste. The table, State Authorities Over Radioactive Materials and Waste, lists the related functions performed by TNRCC, the Texas Department of Health, and the Texas Railroad Commission.

| State Authorities Over Radioactive Materials and Waste |  |
| :---: | :---: |
| Texas Natural Resource Conservation Commission | - responsible for licensing a low-level radioactive waste disposal facility <br> - responsible for siting, developing, operating, decommissioning, and eventually closing the state low-level radioactive waste disposal facility <br> - inspects and licenses inactive disposal sites with buried radioactive waste <br> - authorized to license disposal of naturally occurring radioactive material not associated with oil and gas production |
| Bureau of Radiation Control, Texas Department of Health | - licenses transport, handling, and storage of low-level-radioactive waste <br> - issues radioactive material licenses for in situ uranium mining and processing, and uranium byproduct disposal <br> - licenses operators of radiation equipment and users of radioactive materials <br> - registers X-ray equipment |
| Texas Railroad Commission | - licenses the disposal of naturally occurring radioactive material associated with oil and gas exploration and production |

- As shown in the table, Radioactive Waste Disposal Timeline, regulatory authority for radioactive waste has changed often since 1981. The Legislature continues to evaluate authority over radioactive waste and by-product materials.

|  | Radioactive Waste Disposal Timeline |
| :--- | :--- |
| 1981 | The Texas Legislature creates the Texas Low-Level Radioactive Waste <br> Disposal Authority to site, develop, operate, close, and decommission <br> a state facility for low-level radioactive waste disposal. The Texas <br> Department of Health is the permitting agency. |
| 1991 | The Legislature transfers responsibility for licensing all waste disposal <br> activities, including low-level radioactive waste and uranium by- <br> products, from the Department of Health to the Texas Water <br> Commission. Responsibility for regulating the transport, handling, <br> and storage of low-level radioactive waste remains with TDH. |
| 1993 | The Texas Low-Level Radioactive Waste Disposal Authority submits <br> an application for a disposal license at a site in West Texas. |
| The Texas Water Commission merges with the Texas Air Control <br> Board to form TNRCC. TNRCC holds responsibility for licensing <br> disposal of low-level radioactive waste and uranium mill tailings. |  |
| 1997 | The Legislature approves the Texas Low-Level Radioactive Waste <br> Disposal Compact with Maine and Vermont. |
| 1998 | The Legislature returns responsibility for licensing uranium by- <br> product disposal to TDH. |
| TNRCC concludes a contested hearing by denying the Authority's <br> 1991 license application based on the potential for seismic activity <br> and adverse socioeconomic impact. <br> Congress ratifies the Texas Low-Level Radioactive Waste Disposal <br> Compact. |  |
| 1999 | The Legislature abolishes the Texas Low-Level Radioactive Waste <br> Disposal Authority and transfers its functions to TNRCC, making it <br> responsible for both the operation and regulation of low-level <br> radioactive waste disposal in Texas. |
| 1 |  |

- Among its interim charges for the 2001 session, the House Committee on Environmental Regulation is considering the ramifications surrounding the handling, processing, and disposal of low-level radioactive waste within the borders of the state as they relate to waste from the Texas Low-Level Radioactive Waste Disposal Compact, non-compact waste generated by the federal government, mixed waste, and licensing of a private or state entity. ${ }^{1}$
The Senate Natural Resources Committee, during the interim, is studying storage and disposal options for low-level radioactive waste as well as other practical matters concerning disposal, the Compact, and the viability of public-private ventures. ${ }^{2}$

> House and Senate committees are also studying the radioactive waste issues during the Interim.

> A conflict of interest exists for TNRCC as both the regulator and regulated operator of a lowlevel radioactive waste disposal facility.

Problem: The current regulatory structure for low-level radioactive waste disposal creates a conflict of interest and unnecessarily separates radioactive material regulation.

- A conflict of interest exists in the current regulatory structure for low-level radioactive waste disposal. Since 1993, TNRCC has held statutory authority for licensing and regulating a low-level radioactive waste disposal facility. Recent legislation also gave TNRCC responsibility for selecting the site and obtaining a license for operation of a low-level radioactive waste disposal facility. ${ }^{3}$ This arrangement makes TNRCC both the regulator and the regulated operator of a low-level radioactive waste disposal facility.
- Separating regulation of storage and disposal may not be appropriate for low-level radioactive waste given the blurred distinction between the two. As mentioned, TNRCC is responsible for licensing and operating a low-level radioactive waste disposal facility while the Texas Department of Health regulates transport, handling, and storage of low-level radioactive waste. This division of authority over low-level radioactive waste was created in 1991, when all disposal regulatory authority, including municipal solid waste, was transferred from TDH to TNRCC.

Although not statutorily required, TDH's policy is to limit its storage and processing licenses to seven years. A recent recommendation of the Texas Radiation Advisory Board, based on a particular license application, would allow TDH to issue a seven-year storage and processing license renewable for up to 40 years. ${ }^{4,5,6}$ Based on the facility's design-life and financial assurances, the facility could store waste for 120 years. Comparatively, under TNRCC's low-level radioactive waste disposal regulatory policy, disposal licenses authorize facility operation for 20 years. In its application for a disposal license, the Texas Low-Level Radioactive Waste Disposal Authority requested a 20 -year license with a 10 -year renewal option for a disposal facility with a 100 -year design-life during which institutional monitoring and controls would have been observed.

As shown in the table, Low-Level Radioactive Waste License Terms, the line between storage and disposal is less distinct and supportable given the design and time requirements for safely containing waste.

- TDH also regulates uranium by-product disposal. ${ }^{10}$ Uranium byproducts, although regulated separately from low-level radioactive waste, carry similar health concerns and long-term considerations. For example, uranium mill tailings must be isolated through disposal to prevent the release of radon gas to the atmosphere. Extended exposure to radon is a threat to human health and the environment. Since radiation hazards can exceed 1,000 years, disposal sites must be designed accordingly. TDH has authority to issue these licenses

| Low-Level Radioactive Waste License Terms |  |  |
| :--- | :---: | :---: |
|  | TDH - Storage and <br> Processing License | TNRCC - Disposal <br> License |
| Term of operating <br> license (renewable) | 7 years $^{7}$ | 20 years $^{8}$ |
| Period of institutional <br> control or storage | 160 years | 100 years $^{9}$ |

and, with concurrence of the Nuclear Regulatory Commission, makes final determinations on decontamination and decommissioning plans.

- TNRCC does not have the experience to regulate radioactive waste. Regulation of radioactive waste disposal has not allowed the agency to develop the expertise and infrastructure necessary to implement an effective program. While TDH routinely issues licenses to handle, process, and store radioactive materials, TNRCC authority is only activated by the receipt of a disposal license application. To date, only one application has been received, and it was denied by the Commission in 1998.

When all disposal regulatory authority was transferred from TDH to TNRCC, this included licensing authority for uranium by-product disposal. However, TNRCC lacked the expertise necessary to implement the program and it was transferred back to TDH in 1997.

Under the Texas Radiation Control Act, TNRCC has jurisdiction over the disposal of naturally occurring radioactive material (NORM) waste, except NORM waste produced during the exploration and production of oil and gas, which is under the Railroad Commission's jurisdiction. ${ }^{11}$ TDH has developed rules regarding the use, treatment, and storage of NORM and the Railroad Commission has developed rules regarding oil and gas NORM. However, TNRCC has had difficulty quantifying the NORM disposal problem so that rules have not been adopted to administer this authority.
Result: The State may fail to meet obligations under the Texas Low-Level Radioactive Waste Disposal Compact, providing for the management and disposal of low-level waste.

- Texas is designated as the host state for the Texas Low-Level Radioactive Waste Disposal Compact which was approved by the Texas Legislature in 1993, and Congress in 1998. Under the Compact, Texas is obligated to develop and operate a low-level radioactive waste disposal facility to be used by Texas, Maine, and Vermont. ${ }^{12}$ If left alone, the current regulatory structure may prevent a state site from being licensed and developed. Remaining disposal options are limited and costly for waste generators.

TNRCC does not have experience regulating radioactive waste disposal.

## Recommendation

## Change in Statute

### 12.1 Transfer all regulatory authority for radioactive waste disposal from TNRCC to the Texas Department of Health, Bureau of Radiation Control.

This recommendation will resolve the current conflict of interest that exists within TNRCC pertaining to low-level radioactive waste disposal by transferring regulatory authority and related employees and resources to TDH's Bureau of Radiation Control. The recommendation would transfer regulatory authority for disposal of naturally occurring radioactive material to TDH, except authority over the disposal of NORM waste generated in the exploration of oil and gas, which would remain at the Railroad Commission. TDH would have regulatory authority over transport, handling, storage, and disposal of all radioactive materials and waste, including setting and collecting license fees necessary to recover program costs. TDH would also assume regulatory responsibility for inactive sites with buried radioactive waste.

If contested, a low-level radioactive waste disposal license application should be subject to the same contested case hearing process observed by TNRCC for contested municipal solid waste and hazardous waste permits. Public participation in contested case hearings should be comparable for all waste disposal permits and licenses.

### 12.2 Create a new Division in TNRCC charged with the siting and operation of a low-level radioactive waste disposal facility.

Consistent with existing statutes that make TNRCC responsible for siting and operating the state lowlevel radioactive waste disposal facility, the new Division would be established to focus this effort within the agency. TNRCC may use existing statutory authority to establish an advisory board to provide staff with guidance on the siting, management, and operation of a low-level radioactive waste disposal facility.

## Impact

Separating regulatory authority from operation would enable the State to move forward in its efforts to provide safe management and disposal of low-level radioactive waste. Consolidation of regulatory authority for radioactive materials and waste will allow the State to take maximum advantage of the expertise existing at TDH, and address the existing conflict of interest. The recommendation not to transfer regulatory authority for NORM waste associated with oil and gas production was not based on any analysis in this review, but will instead be considered as part of the Sunset review of the Railroad Commission.

## Fiscal Implication

This recommendation would not result in additional fiscal impact to the State. It would shift staff resources and spending authority as a result of the transfer of regulatory authority for radioactive material and waste disposal from TNRCC to TDH. The regulatory program would be authorized to recover program costs through the assessment of fees, consistent with current rules and statutes. ${ }^{13}$ Staff resources dedicated to the regulatory program would transfer to TDH. Currently, TNRCC has 11 FTEs dedicated to its radioactive waste regulatory program. TDH would have authority to maintain these positions contingent upon need and availability of appropriations. Factors that would affect TDH's staff needs include the agency's option to contract-out for services; and fluctuations in regulatory activities, including reviewing a license application, monitoring for compliance, and considering license renewal.

The recommendation would not change the statutory funding source for TNRCC's activities as operator of a low-level radioactive waste disposal facility. The Low-Level Waste Fund supports the present and future costs of planning and implementing activities associated with this facility. The Fund has a current balance of approximately $\$ 7$ million supported by fees from low-level radioactive waste generators, collected by TDH. ${ }^{14}$ In implementing this recommendation, TNRCC would receive money from the Fund to pay for operating the disposal facility and be authorized, as needed, to fill the 12 FTE positions transferred to it from the Texas Low-Level Radioactive Waste Disposal Authority.

1 More information on the House Committee for Environmental Regulation is availible at http://www.house.state.tx.us/house/commit/ c260.htm; INTERNET. More information about the Committee's interim charges is availible at http://www.house.state.tx.us/house/interim/ charges.htm; INTERNET.
${ }^{2}$ More information on the Senate Natural Resources Committee and its interim charges is availible at http://www.senate.state.tx.us/75r/senate/ commit/c580/c580.htm; INTERNET.
${ }^{3}$ Texas Health and Safety Code Ann., ch. 402, sec. 402.004.
4 As described in the Texas Health and Safety Code, Ann., Chapter 401, the Texas Radiation Advisory Board reviews and evaluates state radiation rules, policies and programs of the Texas Department of Health, the Texas Natural Resource Conservation Commission, the Railroad Commission of Texas, and other state agencies.
${ }^{5}$ Draft memorandum from Jimmy Barker, Waste and Industrial Committee Chair, to Jack Krohmer, Texas Radiation Advisory Board Chair, April 152000.

- Texas Department of Health received an application from Envirocare of Texas for a class-3 low-level radioactive waste storage and processing license on November 23, 1999. In its application, the company requested to receive waste for storage and processing for 40 years and store it for an additional 500 years.
7 Memorandum from Ruth E McBurney, C.H.P., Director, Division of Licensing, Registration and Standards, Texas Department of Health, to Division of Licensing, Registration and Standards, Texas Department of Health, Bureau of Radiation Control, September 7, 1999.
${ }^{8}$ Texas Administrative Code, title 30, part 1, ch.336, sec. 336.716(h).
' Ibid., sec. 336.734(b).
${ }^{10} \mathrm{By}$-product material is defined in statute as "tailings or wastes produced by or resulting from the extraction or concentration of uranium or thorium from ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes." Texas Health and Safety Code Ann., ch.401, sec. 401.003 (B).
"Texas Radiation Control Act: Texas Health and Safety Code Ann., ch. 401; more information on the Texas Natural Resource Conservation Commission's authority for NORM disposal is available at http://www.tnrcc.state.tx.us/permitting/wasteperm/uicrw/rad/norm.html; INTERNET.
12 Texas Low-Level Radioactive Waste Disposal Compact Consent Act, Public Law 105-236, 112 Stat 1542.
${ }^{13}$ Texas Health and Safety Code Ann., ch. 401, sec. 401.301.
${ }^{14}$ Texas Health and Safety Code Ann., ch. 402 , secs. 402.2721 and 402.275. The Low-Level Waste Fund is in the state treasury (Low-Level Waste Account No .088 ) and is supported by fees collected from low-level radioactive waste generators.


## Texas Has a Continuing Need for the Texas Natural Resource Conservation Commission.

## Summary

## Key Recommendation

- Continue the Texas Natural Resource Conservation Commission for 12 years.


## Key Findings

- Texas has a continuing interest in protecting human health and the quality of its natural resources.
- Despite progress, remaining environmental problems and challenges require a continued regulatory effort.
- No other state, local, or private entity exists that can perform TNRCC's core function of protecting the environment.
- While organizational structures vary, all other states use statewide agencies to provide for the administration of environmental laws and protection of human health and the environment.


## Conclusion

The Texas Natural Resource Conservation Commission's mission - to protect the state's human and natural resources, consistent with sustainable economic development - is vital to Texas and its citizens. TNRCC's focus is the preservation of human health through improved water, air, and land quality. While numerous environmental challenges exist, Texas is served by having a state agency that administers environmental protection and regulatory programs.
The Sunset review evaluated the continuing need for a single, independent agency to manage state and federal laws designed to protect the environment and human health. The review assessed whether the agency's functions could be successfully transferred to another agency, and looked at how other states administer environmental regulatory programs.

## Support

Current Situation: Texas has a continuing interest in protecting human health and the quality of its natural resources.

- State and federal laws have established the necessity to protect the environment and public health by enacting comprehensive environmental laws to protect air and water quality, ensure the proper disposal of waste, and cleanup natural resources adversely impacted by pollution. TNRCC's stated mission as the administrator of environmental laws is to protect the state's precious human and natural resources, consistent with sustainable economic development. ${ }^{1}$
- Failing to adequately protect the state's natural resources would have a direct impact on the quality of life and health of Texas citizens. The connection between environmental conditions and human health is well established. For example, air contaminants, such as groundlevel ozone and particulate matter, can lead to respiratory disease such as asthma, and poor water quality can jeopardize safe drinking water.

In addition, the health of the state's economy is interrelated to the state of the environment. Polluted air, water, or land not only diminishes individuals' quality of life, but also increase the operating cost of doing business in the state. Specifically, entities wanting to locate in the state's largest cities of Houston and Dallas face additional costs associated with meeting federal clean air standards. Moreover, the State risks losing significant federal highway funds because of the nonattainment of air standards. Up to $\$ 1$ billion in funds could be withheld if the State fails to meet the standards by the year 2007 - significantly impacting economic development in the state. ${ }^{2}$

Current Situation: Despite progress, remaining environmental problems and challenges require a continued regulatory effort.

- Through its core functions of permitting and enforcement, TNRCC has sought to address environmental problems in the state. While judging the success of environmental protection laws at both the state and federal levels is subject to debate by competing claims about the condition of the environment, a continued regulatory effort is needed to ensure compliance with accepted quality standards for air and water, and to clean-up past contamination.
Without engaging in the debate on the success of environmental protection in Texas by illustrating trends in various indicators, staff looked at the regulatory effort of TNRCC to ensure compliance with
environmental standards. The chart, TNRCC Regulatory Efforts, summarizes several indicators that can be used in assessing the agency's effort in protecting the state's environment and its citizens' health. ${ }^{3}$

| TNRCC Regulatory Efforts |  |  |
| :--- | :---: | :---: |
| Indicator | FY 1993 | FY 1999 |
| Total Permit Actions | $4,120^{*}$ | 4,638 |
| Air Facilities Inspected | 6,937 | 8,920 |
| Wastewater Facilities Inspected | 3,227 | 8,419 |
| Hazardous Waste Facilities Inspected | 1,709 | 1,057 |
| Enforcement Actions Taken | 484 | 662 |
| Administrative Penalties Assessed | $\$ 10.9$ million | $\$ 5.1$ million |
| Emergency/Immediate Response <br> Cleanups Completed | 4,993 | 491 |

*Total does not include water rights and availability permit actions.

- Despite these efforts, the State still faces many difficult environmental problems. An immediate concern is cleaning the air in the state's largest cities so they meet federal clean air standards. Additionally, the agency will need to continue assessing the state's surface water quality through the federally mandated Total Maximum Daily Load program. Additional challenges, such as regulating stormwater discharges and addressing other nonpoint sources of pollution, will continue to present challenges to the state in protecting its natural resources and the health of its citizens.
Need for Agency Functions: No other state, local, or private entity exists that can perform TNRCC's core functions of protecting the environment.
- State statute authorizes local authorities, such as city health departments and county pollution control agencies, to enforce state environmental laws. While these entities complement the state's regulatory efforts, they do not possess the jurisdiction or resources to effectively address international, state, or even regional environmental problems.
- The State could have EPA administer federally required environmental protections laws. However, this relationship would not support statespecific solutions to problems unique to the State of Texas, and would


## TNRCC administers

 several programs that do not directly rèlate to its core mission of protecting the environment.| Ancillary TNRCC Programs |  |  |
| :--- | :---: | :---: |
| Program | Budget | FTEs |
| Dam Safety | $\$ 296,962$ | 6.0 |
| Weäther <br> Modification | $\$ 2,885,011$ | 1.0 |
| Floodplain <br> Management | $\$ 193,071$ | 3.0 |
| Water Utility <br> Ratemaking | $\$ 1,648,826$ | 32.0 |
| Occupational <br> Licensing | $\$ 1,540,166$ | 24.0 |
| Aboveground <br> Storage Tanks | $\$ 40,136$ | 1.2 |
| Tourism <br> Development <br> Districts* | $\mathrm{N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| TOTAL | $\$ 6,604,172$ | 67.2 |

*Resources provided by other existing programs as needed.
jeopardize the federial funding for administering the mandated programs - approximately $\$ 47$ million. By maintaining TNRCC as the state authority for environmental regulation, the State has been able to actively seek the responsibilities associated with federal requirements, thus reducing the amount of federal intervention in local issues.

- The organizational structiure for adminisistering environmental laws in Texas has conitinued to evolve, culminating in the agency's current structure. TNRCC - created in 1993 by combining the responsibilities of the former Texas Air Control Board, Texas Water Commission, and waste management programs from the Texas Department of Health - is envisioned as a comprehensive envirorimental regulatory ageicicy. Separating the agency along media responsibilities, while an alternative, would fail to recognize the multimedia nature of pollution and the solutions needed to effectively address the adverse impacts of pollution.
Despite the advantages of consolidating activities into a single agency, this structure causes the agency to administer several programs that are not directly related to its core mission of protecting the environment. Concerns have been raised that the agency is too big, or that it lacks focus on its most important duties. These responsibilities account for 67.2 employees and $\$ 6.6$ million of the agency's total funding for fiscal year 1999. The chart, Ancillary TNRCC Programs, summarizes programs that do not directly support the agency's mission. ${ }^{4}$

Comparison: While organizational structures vary, all other states use statewide agencies to provide for the administration of environmental laws to protect human health and the environment.

- All states have chosen to establish an agency to administer state and federal environmental laws. While some states have chosen to allow EPA to administer certain federally mandated programs, such as the National Pollutant Discharge Elimination System program, all maintain a state presence in administering and enforcing environmental regulations. In 1998, 74 percent of all delegable federal programs had been assumed by the states. ${ }^{5}$ Additionally, many states have taken the initiative to enact laws that exceed federal requirements. A 1999 Council of State Governments report found that 79 percent of the states have air programs that exceed federal requirements in at least one aspect. ${ }^{6}$


## Recommendation

## Change in Statute

### 13.1 Continue the Texas Natural Resource Conservation Commission for 12 years.

## Impact

This recommendation would continue the Texas Natural Resource Conservation Commission as an independent agency, responsible for protecting human health and the state's natural resources while maintaining the state's ability to sustain economic development. The agency would continue to permit private and public entities that impact human health or the state of the environment through emissions or discharges of regulated pollutants. If the Legislature continues the agency, it may also want to consider streamlining the functions of the agency by transferring programs unrelated to its core mission.

## Fiscal Implication

If the Legislature continues the current functions of TNRCC, using the existing organizational structure, the agency's average annual appropriations of $\$ 386.2$ million would continue to be required for the operation of the agency.

[^8]

| Texas Natural Resource Conservation Commission |  |
| :---: | :---: |
| Recommendations | Across-the-Board Provisions |
|  | A. GENERAL |
| Update | 1. Require at least one-third public membership on state agency policymaking bodies. |
| Update | 2. Require specific provisions relating to conflicts of interest. |
| Update | 3. Require that appointment to the policymaking body be made without regard to the appointee's race, color, disability, sex, religion, age, or national origin. |
| Update | 4. Provide for the Governor to designate the presiding officer of a state agency's policymaking body. |
| Update | 5. Specify grounds for removal of a member of the policymaking body. |
| Already in Statute | 6. Require that information on standards of conduct be provided to members of policymaking bodies and agency employees. |
| Apply | 7. Require training for members of policymaking bodies. |
| Already in Statute | 8. Require the agency's policymaking body to develop and implement policies that clearly separate the functions of the policymaking body and the agency staff. |
| Already in Statute | 9. Provide for public testimony at meetings of the policymaking body. |
| Update | 10. Require information to be maintained on complaints. |
| Update | 11. Require development of an equal employment opportunity policy. |


| Texas Natural Resource Conservation Commission |  |
| :---: | :---: |
| Recommendations | Across-the-Board Provisions |
|  | B. LICENSING ${ }^{1}$ |
| Already in Statute ${ }^{\text {2 }}$ | 1. Require standard time frames for licensees who are delinquient in renewal of licenses. |
| Already in Statilite ${ }^{3}$ | 2. Provide for notice to a person taking an examination of the results of the examination within a reasonable time of the testing date. |
| Apply ${ }^{4}$ | 3. Authorize agencies to establish a procedure for licensing applicants who hold a license issues by another state. |
| Not Applicable | 4. Authorize agencies to issue provisional licenses to license applicants who hold a current license in another state. |
| Update ${ }^{5}$ | 5. Authorize the staggered renewal of licenses. |
| Already in Statute | 6. Authorize agencies to use a full range of penalties. |
| Apply ${ }^{6}$ | 7. Revise restrictive rules or statutes to allow advertising and competitive bidding practices that are not deceptive or misleading. |
| Already in Statute ${ }^{7}$ | 8. Require the policymaking body to adopt a system of continuing education. |

[^9]

# Agency Information 

## Agency at a Glance

TThe Texas Natural Resource Conservation Commission (TNRCC) protects the state's natural resources and human health by ensuring clean air, clean water, and the safe management of waste; in conjunction with sustainable economic development. The Legislature created the agency in 1993 by consolidating the Texas Water Commission, Texas Air Control Board, and environmental programs from the Texas Department of Health.

The agency's major responsibilities fall into the following categories.

- Implementing state and federal environmental regulatory laws by issuing permits and authorizations for:
- the control of air pollution;
- the safe operation of water and wastewater facilities, and
- the treatment, storage, and disposal of hazardous, industrial, and municipal waste and of low-level radioactive waste.
- Ensuring compliance with state and federal environmental laws and regulations by:
- conducting inspections of regulated facilities;
- monitoring air and water quality;
- providing technical assistance;
- encouraging voluntary compliance; and
- taking formal enforcement action against suspected violators.
- Developing plans for the cleanup and eventual reclamation of contaminated industrial and abandoned hazardous waste sites, and for the restoration of air and water quality.
- Setting water rates and allocating surface water rights.


## Key Facts

- Funding. The Legislature appropriated TNRCC $\$ 353.1$ million for fiscal year 1999. Regulatory fees comprise $\$ 282.4$ million, or

Texas is close to having a fully integrated environmental regulatory agency.

> The Commission's structure and quasijudicial functions are unique in Texas.

80 percent, of the agency's budget. Other revenue sources include federal funds of $\$ 47.5$ million, or 11 percent; General Revenue of $\$ 19.0$ million, or 4.5 percent; and other sources, that provide the remaining $\$ 9.7$ million, or 2.4 percent.

- Staffing. TNRCC has approximately 2,800 employees. Most are located at the agency's headquarters in Austin, and more than 700 are distributed among TNRCC's 16 regional offices.
- Oversight. TNRCC is governed by a three-member, full-time, salaried Commission. This body is unique because it performs the quasi-judicial functions of approving and denying permit applications and enforcement orders.
- Federal Overlay. One of TNRCC's primary functions is to implement federal environmental regulation in Texas. The agency is obligated to carry out federal environmental programs such as those required by the Clean Air Act and the Clean Water Act. The Legislature and TNRCC have often sought to assume the responsibilities associated with federal requirements to reduce the amount of federal intervention in local issues and to make the regulatory process more efficient.
- Federal Air Quality Standards. Four urban areas in Texas, home to nearly 50 percent of the state's population, currently exceed federal standards for ozone. These urban areas are Houston-Galveston, Dallas-Fort Worth, El Paso, and Beaumont-Port Arthur. To comply with federal air quality regulations, TNRCC must prepare long-range plans for reducing air pollutants in these areas, commonly referred to as nonattainment areas. If these areas do not reduce their ozone levels to meet the standard within established time frames, they are subject to reductions in federal transportation funding and limits on economic growth.
- Water Quality Management. In Texas, 200 water bodies do not meet state and federal water quality standards, such as for levels of dissolved oxygen or fecal coliform bacteria. These water bodies are located throughout the state and have been prioritized by TNRCC according to the level of danger posed to human health and the environment. To comply with federal water quality regulations, TNRCC must identify pollutant sources and prepare plans for reducing pollution levels in each impaired water body over a tenyear period.
- Low-Level Radioactive Waste. In 1999, the Legislature transferred the functions of the Texas Low-Level Radioactive Waste Disposal Authority to TNRCC making it responsible for both the operation and regulation of low-level radioactive waste disposal in Texas.
- Workload. TNRCC staff perform a wide variety of complex tasks to ensure compliance with federal and state regulations and to protect public health and the environment. In fiscal year 1999, the agency took 5,426 permits actions, issued 662 enforcement orders, performed nearly 106,000 inspections, operated 120 air monitoring stations, conducted over 7,000 complaint investigations, and coordinated work on 78 Superfund sites.


## Agency History

The history of environmental regulation in 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. Natural resource programs were established in Texas at the turn of the century, motivated initially by concerns over the management of water resources and water rights. In response to developments in the rest of the nation and mandates from the federal government, state natural resource efforts broadened at mid-century to include the protection of air and water resources, and later to the regulation of waste generation, storage, treatment, and disposal.

During the 1990s, the Texas Legislature took action to make natural resource protection more efficient by consolidating programs, culminating in the creation of the Texas Natural Resource Conservation Commission in 1993 as a comprehensive environmental protection agency. The Legislature's other goals of consolidation were to improve customer service and coordination between programs. The chart, History of Environmental Agencies in Texas - 1913 to 1999, illustrates the history of TNRCC's predecessor agencies. For a more detailed account of the history of environmental regulation in Texas, see Appendix A, Major Events in Natural Resource Protection. For information about major federal environmental laws affecting Texas, see Appendix B, Summary of Major Federal Environmental Laws.

## Governing Body

The Texas Natural Resource Conservation Commission is governed by a three-member, full-time, salaried Commission. The Governor appoints members to serve staggered, six-year terms. A member may not serve more than two terms. The Governor also appoints the Chair of the Commission. The only statutory qualification for TNRCC


## On the Internet

Information about TNRCC, including the agency's history, calendars, proposed rules, data collected through monitoring activities, and extensive information about other agency programs is available on the Internet at www.tnrcc.state.tx.us

Environmental regulation in Texas has evolved from protecting the right of access to natural resources to protecting public health and conserving natural resources.


Commissioners is that they be from different areas of the state. In addition, state and federal laws prohibit conflicts of interest and impose certain ethical standards. The table, TNRCC's Governing Body, lists the current Commissioners, their hometowns, and their terms of appointment.

The Water Code sets out the authority of the Commission. The Commissioners are responsible

| TNRCC's Governing Body |  |  |
| :---: | :---: | :---: |
| Robert J. Huston, Chair (Austin) | Appointed Term Expires | $\begin{array}{r} 1 / 7 / 99 \\ 8 / 31 / 03 \end{array}$ |
| R.B. "Ralph" Marquez" (Texas City) | Appointed Term Expires | $\begin{array}{r} 5 / 1 / 95 \\ 8 / 31 / 05 \end{array}$ |
| John M. Baker, Jr. (Temple) | Appointed Term Expires | $\begin{array}{r} 9 / 8 / 95 \\ 8 / 31 / 01 \end{array}$ |

*Commissioner Marquez is serving a second term. for establishing the goals and policies of the agency and performing the quasi-judicial functions of approving and denying permit applications and enforcement orders. The Commission also hires the agency's Executive Director and Deputy Executive Director.

The Commission performs its business in two types of public forums on a regular basis, both of which are subject to the requirements of the Open Meetings Act. In Commission agenda meetings, the members consider and act on regulatory issues such as contested permits, enforcement matters, and agency rules. These meetings generally occur every other week. In Commissioner work sessions, staff briefs agency leadership on proposed rules, national issues, and other items of interest and receives direction on policies and priorities. These work sessions occur once or twice a month, depending on the Commissioners' workloads and schedules.

The Commission receives additional input from advisory committees that can be created by specific law or by Commission resolution. The Commission may also create ad hoc workgroups to assist in specific policy issues. Currently, the Commission has 13 advisory committees and 12 ad hoc advisory committees. Advisory committees have no executive or administrative powers over the operation of the agency. As such, committee members are not salaried employees and are not reimbursed for expenses unless authorized by the Legislature, or by resolution of the Commission. The text box, Advisory and Ad Hoc Committees, lists each committee.

The Commissioners' staff includes executive assistants and a General Counsel to provide advice on policy and legal matters. Other staff activities include providing public assistance and alternative dispute resolution services. The Commissioners' staff also includes the Public Interest Counsel, which is authorized by statute to represent the public's interest, independent of the agency, during agenda meetings and contested permit hearings. These activities will be discussed later in the section on TNRCC's permitting process.

The agency receives input from 25 advisory and ad hoc committees.


## Staff

In fiscal year 1999, TNRCC had a staff of 2,848 employees with 2,128 located at the agency's headquarters in Austin. The remaining employees are distributed among the agency's 16 regional offices and two field offices for estuary programs in Galveston and Corpus Christi. In addition, the agency created two satellite offices, in Perryton and Stephenville, to address specific environmental issues concerning concentrated animal feeding operations. The map, TNRCC Regional Offices and Staff, illustrates the agency's regional structure and number of employees per location. Over the past three years, TNRCC, at the request of the Legislature, has moved employees from Headquarters to regional offices to provide more direct customer service. A comparison of the agency's workforce composition to the minority civilian labor force is shown in Appendix D, Equal Employment Opportunity Statistics.

TNRCC's Executive Director manages the daily operations of the agency, provides guidance to staff on policies, and ensures compliance with statutory obligations of the agency. To perform these responsibilities, the Executive Director's staff provides agency communications, intergovernmental relations, and small business and local government assistance.

This last function is important because small businesses and local governments often do not have the resources to fully understand their responsibilities under the agency's regulatory programs. The Executive Director's staff provides assistance to these entities on when to get a permit, how the permitting process works, how to stay in compliance, and what to do in case of an enforcement action.

## TNRCC Regional Offices and Staff



Under the Executive Director, TNRCC is organized according to the major functions of the agency. Five offices perform these functions with each headed by a Deputy Director who reports directly to the Executive Director. The five offices are: Permitting; Compliance and Enforcement; Environmental Policy, Analysis, and Assessment; Legal Services; and Administrative Services. The chart, TNRCC Organizational Chart, illustrates the organizational structure of the agency.

TNRCC's structure represents the full integration of its predecessor agencies into a comprehensive natural resource conservation agency. When the agency was created in 1993, the functions of the Texas Air Control Board, Texas Water Commission, and programs from the Department of Health existed in separate divisions and continued to operate largely independently except for their unified governing structure. Today, the permitting, compliance, and enforcement functions of the predecessor agencies have been merged to form a more unified organization.

## Funding

## Revenues

The agency collected $\$ 420.7$ million in revenue for fiscal year 1999. The chart, Sources of Revenue - FY 1999, shows sources of revenue. Since the Legislature does not appropriate all fee revenues collected to TNRCC, the agency's annual appropriation, at $\$ 353.1$ million, is less than the amount of revenue it collects. The agency was appropriated an additional $\$ 19.4$ million for riders, including continuation

Sources of Revenue FY 1999
 Session. of the Clean Rivers Program and support for Senate Bill 1 from the 1997 Legislative

Fees provide a large amount of the agency's budget. The agency administers 84 fees, of which 50 are major sources of revenues. Dedicated fee revenues related to waste, air, and water programs, and some appropriated receipts, provided 82 percent of agency revenues in fiscal year 1999. For fiscal year 2000, fee revenue appropriated to the agency declined by 13 percent from fiscal year 1999. For detailed information on agency fees, including amounts, activities supported by fees, and fee sources, see Appendix C.


General Revenue funding, as a percentage of the agency's total revenue, is decreasing, and in fiscal year 1999 the General Revenue Fund provided less than 5 percent of agency financing, declining from a high of 25 percent allocated to TNRCC's predecessor agencies. The percent of federal funding remained stable at 11 percent of the agency's budget for fiscal year 1999. Federal funds are allocated for different agency responsibilities, including pollution prevention, solid waste management, drinking water safety, Superfund site clean

## Expenditures by Goal FY 1999

 \$392,180,467

| Expenditures by Strategy  <br> FY 1999  |  |
| :--- | ---: |
| Goal 1: Assessment and Permitting | $\$ 141,047,089$ |
| Air Quality Assessment and Planning | $\$ 46,682,832$ |
| Air Permitting | $10,683,855$ |
| Waste Management Assessment <br> and Planning | $22,561,613$ |
| Waste Permitting | $8,444,369$ |
| Water Resource Assessment and Planning | $24,098,284$ |
| Water Permitting | $10,457,607$ |
| Water Utilities Oversight | $2,505,906$ |
| Safe Drinking Water | $11,821,152$ |
| Pollution Prevention and Recycling | $3,791,471$ |
| Goal 2: Enforcement and Compliance | $\$ 42,994,307$ |
| Field Inspections and Complaint Response | $33,553,694$ |
| Enforcement and Compliance Support | $7,888,459$ |
| Occupational Licensing | $1,552,154$ |
| Goal 3: Pollution Cleanup | $\$ 164,397,205$ |
| Petroleum Storage Tank Cleanup | $110,359,326$ |
| Petroleum Storage Tank Administration | $5,125,077$ |
| Hazardous Materials Cleanup | $48,912,802$ |
| Goal 4: Indirect Administration | $\$ 43,741,866$ |
| Central Administration | $15,147,364$ |
| Information Resources | $14,971,438$ |
| Other Support Services | $13,623,064$ |
| Grand Total | $\mathbf{\$ 3 9 2 , 1 8 0 , 4 6 7}$ |

up, and estuary protection.

## Expenditures

TNRCC spent $\$ 392.2$ million in fiscal year 1999. The pie chart, Expenditures by Goal - FY 1999, provides a proportional snapshot of expenditures. Pollution cleanup represented the largest portion of the agency's expenditures at 42 percent, with most coming from petroleum storage tank cleanup. Assessment activities, such as for air and water quality, and permitting represented 36 percent. The table, Expenditures by Strategy - FY 1999, shows how TNRCC spent its funds to meet specific goals.

Fifty-seven percent of TNRCC's budget, \$181 million, passes through to local governments and contractors primarily for waste management activities, water quality monitoring, and air quality programs. These pass through dollars provide for contractor clean up of leaking petroleum storage tanks and Superfund sites, or local environmental compliance activities. The text box, Pass Through and Contract Funds - FY 1999, shows the major fee dollars passed through to local governments and major contracted agency functions.

TNRCC's use of Historically Underutilized Businesses (HUBs) in purchasing goods and services can be seen in Appendix E. The agency exceeded state goals in the commodities category from fiscal years 1996 to 1999, but fell short of state goals in all other applicable areas.

| Pass Through and Contract Funds - FY 1999 |  |
| :---: | :---: |
| Major Fees Returned to Local Governments | Major Contracts for Environmental Services |
| Councils of Governments <br> $\$ 13$ million annually, or 50 percent, of solid waste tipping fees returned for waste management activities. <br> Counties with Hazardous Waste Facilities <br> $\$ 6$ million annually, or 25 percent, of commercial management fees returned for waste management activities. <br> Local Entities in Near NonAttainment Areas $\$ 5$ million annually, or 7 percent, of air fees returned for air quality planning and pollution control programs. <br> River Authorities $\$ 5$ million annually, or 90 percent, of water quality assessment fees returned for administration of water quality programs. | Municipal Solid Waste Planning, Recycling, and Cleanup <br> $\$ 32$ million for 87 contracts with councils of governments and private companies. Includes recycling contracts with tire disposal companies. <br> Water Quality Assessments, Pollution Control, and Utilities Oversight <br> $\$ 30.2$ million for 137 contracts with river authorities, cities, universities, councils of governments, and private companies. <br> Petroleum Storage Tank Cleanup $\$ 16$ million for 17 contracts to remediate leaking storage tanks. <br> State/Federal Superfund and Solid Waste Cleanup <br> $\$ 16$ million for 87 contracts to assess and remediate sites. <br> Air Monitoring, Planning, and Quality Control <br> $\$ 11$ million for 95 contracts with cities, councils of governments, county health districts, universities, and private companies. |

## Agency Operations

The mission of the Texas Natural Resource Conservation Commission is to protect the state's natural resources and human health by ensuring clean air, clean water, and the safe management of waste, in conjunction with sustainable economic development. The agency accomplishes this mission through four core functions - permitting, compliance, enforcement, and remediation. State and federal environmental regulations require entities discharging pollutants into the air or water, or disposing of waste, to obtain a permit to do so from TNRCC.

The agency ensures that regulated entities meet the requirements of their permits or other environmental regulations through its compliance activities. If a regulated entity fails to meet the State's requirements, TNRCC has the authority to take enforcement action against the entity to reduce the risk of harm to the state's natural resources and public health due to contamination. When contamination occurs, TNRCC is responsible for cleanup, referred to as remediation, either by holding the responsible party accountable, or by using state funds to pay for the clean up effort.

The agency supports its core functions through two additional activities. First, TNRCC monitors the quality of the state's air and water to ensure that the agency's core functions effectively control the amount of pollution in the environment. Second, the agency analyzes data gathered from the agency's monitoring activities to develop long-range, strategic plans and programs for dealing with the state's environmental issues.

The following material describes each of TNRCC's core and support functions and how they promote the agency's mission.

| Major TNRCC Permits |  |  |
| :---: | :---: | :---: |
| Media | Permit | Number of Permit Actions FY 1999 |
| Air | Operating | 2,301* |
|  | New Source |  |
| Water | Wastewater | 2,506** |
|  | Drinking Water |  |
|  | Surface Water and Water Rights |  |
| Waste | Municipal Solid Waste | 619*** |
|  | Industrial and Hazardous Waste |  |
|  | Underground Injection Control Wells |  |
|  | Low-Level Radioactive Waste Disposal |  |
|  | TOTAL | 5,426 |

* Includes actions taken on permits by rule.
** Actions taken on water quality permits and water rights only.
***Actions taken on municipal solid waste and industrial and hazardous waste permits only.


## PERMITTING

The primary function of TNRCC is to regulate the release of pollutants into the air and water or on land. The issuance of permits to industrial, municipal, and small business sources is the essential mechanism used by the agency to regulate the release of pollution and use of the state's natural resources. TNRCC's permitting activities range from authorizing the construction and operation of printing presses, to approving bond issues for water districts, to licensing the operation of major industrial facilities. In all, TNRCC processes nine major types of permits for air, water, and waste. These permits and the number of permitting actions performed in each media are listed in the table, Major TNRCC Permits.

While the agency has worked to standardize its permitting process for air, water, and waste activities, each of these media have special permitting requirements. The basic permitting process and separate descriptions of air, water, and waste permitting are provided in the following material.

## Permitting Process

TNRCC is currently implementing a standardized permitting process to increase administrative efficiencies. The new process is expected to enable more efficient handling of permit applications by routing each application along one of five paths shown in the chart, Five Path Permitting Process. The paths are differentiated according to the significance of the permit requested and according to the length of time required for TNRCC to conduct administrative and technical reviews.

| Five Path Permitting Process |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Path 1 <br> New permits and major modifications | Path 2 <br> Minor amendments and renewals | Path 3 <br> Permits by rule and registrations | Path 4 <br> Administrative changes and site revisions | Path 5 <br> Notifications and certifications |
| Application Received | Application Received | Application Received | Application Received | Application Received |
| Administrative Review | Administrative/ Technical Review | Administrative/ Technical Review | Limited Technical Review |  |
| Technical Review |  |  |  |  |
| Initial Draft Permit | Initial Draft Permit |  |  |  |
| External Review | External Review | External Review |  |  |
| Final Draft | Final Draft |  |  |  |
| Issue/Deny Permit | Issue/Deny Permit | Issue/Deny Permit | Issue/Deny Permit | Receive and Track |

Administrative and Technical Review - The permitting process for major permits generally includes an administrative and technical review, as well as providing opportunities for public participation. After TNRCC receives a permit application, it conducts an administrative review of the application to make certain that all required documentation has been submitted. The technical review evaluates the scientific data accompanying the application and determines whether the applicant meets all technical and site-specific regulations. TNRCC prepares an initial draft permit for review and comment by agency staff, the applicant, and the U.S. Environmental Protection Agency (EPA) before producing a final draft permit.

Public Participation - The public's introduction to the permitting process likely comes through a notice intended to inform the public of a permit's status and opportunities to participate. Permits administratively complete on or after September 1, 1999 are subject to House Bill 801, passed during the 76th Legislative Session, which modified public participation procedures for certain environmental permits. Key features of HB 801 are listed in the text box, Provisions of HB 801.

## Provisions of HB 801

- Requires earlier public notice.
- Expands public comment opportunities.
- Limits scope of issues that may be heard in a contested hearing to those that are relevant and raised in public comment.
- Requires the Commission to limit the duration of a hearing.
- Moves the hearing request period later in the permitting process.
- Separates the public comment portion of the process from the hearing request portion for water and waste permit actions.
- Allows protestants to become parties more easily.

Under HB 801, the public participation process begins with the Notice of Receipt of Application and Intent to Obtain a Permit that is published within 30 days after the application is determined to be administratively complete. This notice provides information about the application and provides the public an opportunity to comment and request a public meeting. Generally, for air permit applications, the notice will also contain information on how to request a contested case hearing. For other permit applications, the opportunity to request a hearing comes later in the process.

For some applications, a second notice, called a Notice of Application and Preliminary Decision, is issued after completion of the technical review and the Executive Director's preliminary decision on the application. Again, this notice solicits public comment and any requests for public meeting. After the close of the comment period, the Executive Director files a response and makes a decision on the application. The Executive Director's response and decision is mailed out and instructions for requesting a case hearing or reconsideration are provided.

Public Meetings - Public meetings, which are usually conducted by TNRCC's Office of Public Assistance, may be held during the technical review phase to receive comments early in the permitting process. Informal in nature, these meetings allow for discussion among TNRCC staff, the permit applicant, and concerned citizens. For some permits, such as new municipal solid waste facilities and hazardous waste maragement operations, public meetings are required by statute.

While TNRCC conducted only 29 public meetings for permit applications in 1999, the agency anticipates an increase in the number of public meetings requested as a result of HB 801 . This bill provides for a mandatory public meeting on the request of any member of the Legislature representing the area in which the facility is located.

Contested Hearings - The contested hearing process provides the public with a mechanism to formally oppose a permit application. In legal proceedings similar to civil trials, all parties, including the permit applicant, TNRCC staff, and other affected parties, must produce legally admissible evidence in support of their positions in favor of or against issuance of a permit.

A hearing and party status may be granted to individuals with a "personal justiciable interest," meaning they must be personally affected by a potential permit in a way that is not shared with the general public. Once granted party status, individuals may present testimony, offer
evidence, cross examine other parties' witnesses, and object to the introduction of evidence.

Other parties include the permit applicant; TNRCC's Executive Director, represented by the Office of Legal Services; and TNRCC's Office of Public Interest Counsel. The Public Interest Counsel was created to ensure that the public's broad interests are considered in all Commission actions, including contested cases. Statutorily, the Office works independently of other TNRCC staff to ensure that the Commission promotes the public's interest and is responsive to the environmental concerns of private citizens in the permitting process.

The Commission has authority to grant or deny requests for contested case hearings in permitting matters, but does not preside over the hearings. Through an interagency agreement and by statute, the State Office of Administrative Hearings conducts these hearings. At the conclusion of the contested hearing, the administrative law judge issues a formal recommendation, called a proposal for decision, to the Commission. The Commission considers this proposal and may remand the case for further deliberation, or issue a final decision regarding the permit. Parties may appeal the Commission's decision in state district court. In fiscal year 1999, 84 contested case hearings were held, representing a small fraction of the approximately 5,400 permitting actions taken by the agency. Of the 84 contested case hearings, 31 concerned the issuance of a permit and 53 concerned water utility matters, such as the setting of rates.

Mediation - Not all contested permits undergo a formal hearing process. Alternative dispute resolution procedures may begin any time after the application has been determined administratively complete and at least one letter protesting the application has been received. When granting a hearing request, the Commission may also require that parties participate in alternative dispute resolution before beginning a formal contested case hearing. Using primarily mediation, alternative dispute resolution provides a neutral third party to facilitate negotiation and compromise. These services are intended to resolve conflicts before cases go to hearings to minimize the expense of time and resources of all concerned.

Out of 5,400 permit actions, only 84 resulted in contested case hearings.

## Air Permits

TNRCC issues air permits in accordance with the federal Clean Air Act and the Texas Clean Air Act to limit the amount and content of air emissions from existing or new facilities. Types of TNRCC air permits are shown in the table, Types of Air Permits. Air permits

| Types of Air Permits |  |
| :--- | :--- |
| Permit | Example |
| Operating Permit | Electric utilities, refineries, and <br> chemical plants |
| New Source Review <br> Permit | Construction of new and expanded <br> facilities |

## National Ambient Air Quality Standards

EPA has established National Ambient Air Quality Standards for six air pollutants: ozone, lead, carbon monoxide, sulfur dioxide, nitrogen dioxide, and particulates. The standards were established to protect the public from harmful exposure.

Grandfathered facilities must apply for a permit by 2001 or face higher fees.
are based on federal air quality standards which are briefly described in the text box, National Ambient Air Quality Standards.

Operating permits are required for all major sources of air emissions as designated by federal law. These permits list all of the federal air provisions that apply to a facility, but do not impose any new requirements. They are intended to make the compliance and enforcement processes more efficient by putting all statute, rule, and permit requirements in one place.

While operating permits apply to existing sources, TNRCC generally requires a new source review permit for the construction or modification of any facility which will emit pollutants. In administering new source permits, the agency requires that the facility not impact public health, and that best available control technology be implemented to reduce air emissions, based on the availability of technology and its economic reasonableness.

Best available control technology standards and the review of possible health impacts have not been applied to grandfathered facilities in Texas - facilities in operation before the passage of the State's Clean Air Act in 1971, and which have not been modified. In 1999, however, the Legislature created a program designed to move these older industrial facilities into TNRCC's air permitting system. According to Senate Bill 766, grandfathered facilities either apply for a permit by September 2001 or face paying higher fees. Under Senate Bill 7, grandfathered electric utilities must obtain a permit by May 2003 or cease operations.

Under TNRCC's new source review permitting program, the agency also authorizes the construction or modification of facilities which produce emissions beneath a specified threshold. These individually insignificant air emission sources are issued permits by rule, also known as standard exemptions. TNRCC's regulations authorize permits by rule for 123 types of facilities. These facilities, such as dry cleaners and printing presses, are not required to go through the full permitting process. Facilities operating in violation of permit by rule requirements are still subject to TNRCC enforcement action.

## Water Permits

TNRCC's water permitting responsibilities focus primarily on protecting water quality and ensuring water availability. Although similar to air permitting activities in limiting discharges, TNRCC's water-related activities extend beyond pollution control to include oversight of water utilities and districts, compliance with federal safe drinking water requirements, and determination of water rights. TNRCC's water regulatory activities are summarized in the table, Types of Water Regulation.

| Types of Water Regulation |  |
| :--- | :--- |
| Wastewater | Issuance of permits for municipal and industrial <br> wastewater, stormwater run-off, sewage sludge, and <br> concentrated animal feeding operations. |
| Public Water Systems | Approval of engineering plans for the construction <br> of water systems. |
| Water Rights | Issuance of permits for water rights. |
| Utilities and Districts | Designation of service areas, rate regulation, and <br> management oversight. |

Wasterpater - TNRCC issues two types of wastewater permits: discharge and no-discharge. Discharge permits are state and federal authorizations to release effluent into the state's surface waters. No-discharge permits are state-only authorizations for the disposal of wastewater by land irrigation or evaporation.

In 1998, EPA granted TNRCC authority to administer the Texas Pollutant Discharge Elimination System (TPDES) program, under the federal regulatory effort to protect the quality of surface waters by controlling pollutant discharges. Texas is one of 42 states with this authority. Through TPDES, the agency issues wastewater permits for industrial and municipal facilities, sewage sludge, stormwater, and agricultural discharges. TNRCC uses water quality standards in issuing wastewater permits. The text box, Texas Surface Water Quality Standards, describes these standards.

The Texas Solid Waste Disposal Act authorizes TNRCC to regulate municipal wastewater sludge and sludge from drinking water treatment facilities. TNRCC exercises its permitting authority through the TPDES wastewater discharge program. Regulations govern the processing, blending, transportation, beneficial use, and disposal of sludge. A permit is required for sludge disposal while the transportation and beneficial use of sludge only require registration.

Also under the TPDES program, TNRCC regulates municipal and industrial discharges associated with stormwater run-off. Municipal and industrial stormwater permits differ in their requirements, but both are intended to reduce stormwater discharge through education and implementation of better management practices. Generally, a stormwater permit encourages use of best management practices and does not

## Texas Surface Water Quality Standards

The Texas Surface Water Quality Standards establish limits on the levels of physical, chemical, or biological constituents allowed in water based upon various human and environmental uses for the body of water being protected.

A body of water may be designated for the following uses: aquatic life habitat (fishable), contact or noncontact recreation (swimmable), domestic water supply (including public water supply, industrial water supply, and aquifer protection), and navigation.
impose discharge limits. In contrast, an industrial stormwater permit does limit and may require treatment of the discharge.

TNRCC, through the TPDES program, regulates livestock and poultry waste from concentrated animal feeding operations. Generally, any facility with no vegetation that confines more than 1,000 animal units for a minimum of 45 days in a 12 -month period, is considered a concentrated animal feeding operation and must be permited by TNRCC.

TNRCC regulates the design, operation, and maintenance of Texas' 6,900 public water systems to ensure the provision of safe drinking water.

Public Water Systems - TNRCC administers the federal safe drinking water program to ensure compliance by public water systems with the federal Safe Drinking Water Act. The agency sets requirements for the design, operation, and maintenance of public water systems to ensure that the approximately 6,900 public water systems in Texas provide safe water to their customers. Through this program, TNRCC reviews and approves engineering plans and specifications for construction and routinely monitors drinking water quality.

Water Rights - In addition to wastewater permitting efforts and the regulation of public water systems, TNRCC participates in water conservation, drought management, and the determination of water rights. In Texas, surface water is considered public property and may be used only with explicit permission from the State. TNRCC provides this permission in the form of water rights permits, term permits, temporary permits, and certificates of adjudication to prevent the overallocation of the state's water resources.

Utilities and Districts - TNRCC's regulatory authority over water utilities and districts differs from the permitting process previously described. In this area, TNRCC's regulatory actions include approving applications to establish new water districts, and granting certificates to define utility service areas.

With regard to water districts, which are political subdivisions of the state, TNRCC processes applications for new districts and reviews district bonds to ensure the technical and economic feasibility of bond projects. TNRCC provides educational assistance, reviews annual audit reports of districts, responds to complaints and customer inquiries, and maintains a database on each of the over 1,300 water districts registered with the State.

In contrast to its oversight of water districts, TNRCC exercises more regulatory authority over investor-owned utilities and water supply corporations by processing and granting Certificates of Convenience and Necessity defining the utility service area. In granting a certificate to a utility, TNRCC requires the provider to render continuous and adequate
service to anyone in the service area. The certificate officially designates the utility as the sole service provider to an area, enabling the utility to make the capital investments necessary to provide services.

TNRCC also regulates water utility rates for investor-owned utilities, not located within a city, and water supply corporations. Investor-owned utilities are required to file a rate change application whenever a rate change is desired. Water supply corporations are member-owned, and therefore TNRCC's rate review authority is only triggered by a customerinitiated appellate process in which a petition signed by 10 percent of the affected customers is filed with the Commission. The state has approximately 700 investor-owned utilities and 900 water supply corporations.

## Waste Permits

TNRCC regulates waste treatment, storage, and disposal. Waste is defined as unwanted, discarded, or abandoned materials leftover from a manufacturing process, or refuse from places of human or animal habitation. ${ }^{1}$ This definition of waste is important in determining TNRCC's regulatory authority since a particular waste substance in one setting may be considered reusable as a product in another. TNRCC has no regulatory authority over products. However, an unused product may become waste and subject to TNRCC regulation if it is stored beyond its shelf life, or if it is spilled.

Generally, TNRCC has permitting authority over three categories of waste: municipal solid waste, hazardous and industrial waste, and radioactive waste. These are shown in the table, Types of Waste Permits.

## Municipal Solid Waste - TNRCC

 holds responsibility for the permitting or registration of municipal solid waste facilities in the state. A municipal solid waste permit is required to operate each of the two types of landfills allowed in Texas. The first type of landfill receives household waste and may also accept nonhazardous industrial waste as defined in the text box, Industrial Waste. Waste from construction and demolition, as well as rubbish and brush go to a second type of landfill. Major requirements for these landfills| Types of Waste Permits |  |
| :--- | :--- |
| Permit/Lcense | Examples |
| Municipal Solid Waste Permit | Landfills, composting facilities, <br> and transfer stations |
| Industrial and Hazardous <br> Waste Permit | Landfills, incinerators, boilers, <br> and tanks |
| Underground Injection Well <br> Permit | In situ mining and injection <br> well waste disposal |
| Radioactive Materials License | On-site disposal of naturally <br> occurring radioactive waste not <br> associated with oil and gas <br> production |
| Low-Level Radioactive Waste <br> Disposal License | Disposal of commercial low- <br> level radioactive waste |

## Considerations for Landfill Permits

- Location restrictions with respect to airports, wetlands, and seismically active areas.
- Design requirements to protect groundwater.
- Requirements for groundwater and landfill gas monitoring along the landfill perimeter.
- Correction of groundwater contamination or landfill gas migration.
- Operating requirements to minimize the spread of disease and avoid groundwater contamination.
- Requirements for closure and post-closure maintenance and financial assurance for nonhazardous industrial waste landfills for at least 30 years.
- Compatibility with land-use of the surrounding area.
with regard to location, design, operation, and closure are defined in federal and state statutes and are briefly described in the text box, Considerations for Landfill Permits. In 1999, 181 municipal solid waste landfills were actively accepting waste in Texas. Facilities that compost mixed municipal solid waste, and are not colocated at an existing municipal solid waste permitted facility, also require a permit.

All municipal solid waste incinerators, except those used by licensed hospitals to dispose of medical waste generated on-site, are required to be permitted. Permit requirements for the operation of incinerators include proper disposal of ash, compatibility of surrounding landuse, and compliance with air quality requirements.

Industrial and Hazardous Waste - TNRCC issues permits for the treatment, storage, and disposal of hazardous waste and for off-site treatment, disposal, and commercial storage of nonhazardous industrial waste. Special permit requirements, such as facility design, groundwater monitoring, closure and post-closure care, and financial assurances to cover potential clean up costs, are imposed for hazardous and commercial nonhazardous industrial waste facilities.

Hazardous waste is any waste that has been listed by EPA, or that exhibits one of four characteristics, including ignitability, corrosivity, reactivity, and toxicity. Hazardous waste may be managed and disposed of in several ways including landfills and incinerators. The state currently has 18 permitted hazardous waste landfills, and 28 permitted hazardous waste incinerators.

Nonhazardous by federal definition, industrial wastes are separately regulated and classified in Texas. The three classes of industrial waste are defined in the text box, Industrial Waste. On-site industrial waste disposal facilities are only required to register with TNRCC. Currently, 106 such entities are registered with the agency. However, a permit is required if a disposal facility accepts industrial waste from off-site sources.

Radioactive Waste and Underground Injection Wells TNRCC is responsible for regulating injection wells used for in situ mining and the underground disposal of waste, issuing radioactive material licenses for the on-site disposal of certain naturally occurring radioactive materials not
associated with oil and gas production, and licensing the State's lowlevel radioactive waste disposal facility.

## REMEDIATION

Contamination of soil and water can result from negligence, accidents, disregard for operating rules, or from discharges of pollution before
regulatory policies were in place. In these instances, remediation is necessary to protect human health and prevent further environmental harm.

Site remediation is simply the act of cleaning up a contaminated site. The remediation process follows a series of steps to assist TNRCC in identifying and investigating a contaminated site, and to determine the degree of risk posed to public health. Upon completion of the cleanup, TNRCC ensures that post-closure care is administered at the site if necessary. TNRCC remediation programs include cleanup of leaking petroleum storage tanks, corrective action at industrial facilities, voluntary cleanup, and state and federal Superfund sites. Through these programs, TNRCC has cleaned up approximately 17,000 sites.

> TNRCC is responsible for cleaning up contamination due to negligence, accidents, disregard for operating rules, and pollution caused before regulations were in place.

Petroleum Storage Tanks - TNRCC has authority, through federal and state law, to regulate petroleum storage tanks. This regulation encompasses the registration of storage tanks, including empty or unused tanks, and the remediation of contamination caused by leaking tanks. Petroleum storage tank fees, including tank owner registration and installation fees, pay for corrective actions on leaking tanks and other administrative, inspection, and enforcement costs.

The text box, Petroleum Storage Tank Remediation Fund Eligibility, lists the requirements necessary for the owner or operator of a leaking tank to be eligible for financial remediation assistance. However, in 1997, the Legislature abolished the remediation fee as of 2002 and after August 31,2003, TNRCC will no longer pay for the cleanup of leaking tanks. Instead, all facilities will be required to have an alternate form of financial assurance, such as pollution insurance, to pay for future remediation of leaking tanks. At the end of 1999, the State had identified 22,435 facilities with leaking tanks. TNRCC has determined that further action is unnecessary for approximately two-thirds of these while the remaining 7,612 facilities are in some phase of corrective action.

Corrective Action - Remediation efforts through TNRCC's corrective action program are intended to prevent public

## Petroleum Storage Tank Remediation Fund Eligibility

To be eligible for reimbursement of remediation expenses, the following criteria must be met:

- own or operate a regulated tank;
- tank must contain a petroleum product;
- have registered tanks with TNRCC by December 31, 1995 - tanks installed after December 1, 1995, must have been registered within 30 days of their completion;
- have paid all annual tank fees since September 1987;
- have reported releases to TNRCC for verification by December 22,1998; and
- corrective actions and costs must be preapproved in writing by TNRCC.
exposure to hazardous levels of chemicals. The program targets active industrial facilities where contamination of soil and groundwater has occurred and requires mitigation of contamination to levels protective of public health and the environment. Under state and federal regulations for hazardous and nonhazardous waste, companies are required to undertake corrective action if they release waste to the environment. Companies not complying with corrective action requirements are subject to agency enforcement. Recognizing the impossibility of restoring some contaminated sites to their original state, TNRCC established the Texas Risk Reduction Rule, which establishes an acceptable reduced risk level to be used as a practical standard for site cleanup. ${ }^{2}$

> TNRCC's Voluntary Cleanup Program offers incentives to businesses and local governments to clean up contaminated sites for future use.

Voluntary Cleanup - The Legislature and TNRCC have developed administrative, technical, and legal incentives to encourage participation in the remediation of contaminated sites. Through its Voluntary Cleanup Program, TNRCC approves applications for cleanup, oversees the cleanup effort, and issues certificates of completion formally releasing participants, including lenders and landowners, from any future liability to the State for cleanup costs. The program targets primarily small businesses and local governments and seeks to convert contaminated properties into ones that are economically productive and beneficial to the community. To be eligible, a site may not already be involved in TNRCC's corrective action or enforcement processes.

Under the program, TNRCC administers the federal brownfields program which also provides incentives to remediate and redevelop contaminated sites. Brownfields are industrialized properties which are no longer used due to the liabilities associated with on-site contamination. Since the program's inception in 1995, TNRCC has received 1,110 applications for the Voluntary Cleanup Program, including the brownfields program, with 445 having received certificates of completion.

Superfund - To address highly contaminated hazardous waste sites, Congress created the Superfund Program. Through this program, EPA may require parties responsible for contaminated sites to clean them up. If necessary, the EPA may also clean sites and then seek reimbursement from responsible parties.

After a site is identified, a preliminary assessment is conducted by TNRCC, EPA, or both, to investigate a site's history to determine responsible parties and what contaminants exist at the site. EPA or TNRCC staff then perform a site inspection, taking samples to evaluate and score the site under the Hazardous Ranking System. Sites with high scores are eligible to be added to EPA's National Priorities List for federal Superfund action. The inspection may also determine if immediate removal of contaminants is necessary to stabilize a site and prevent harm
to human health or the environment. A total of 36 sites in Texas are on the federal Superfund list.

Sites that do not qualify for federal action may be placed on the Texas State Superfund Registry and are eligible for state remediation funds. The purpose of the State Superfund program is to clean sites to levels protective of human health and the environment, and not necessarily to remediate property for future economic development. At the end of 1999, 42 sites were listed on the state registry.

## COMPLIANCE

Another core function of TNRCC is to ensure the compliance of regulated entities with federal and state environmental protection laws. The agency accomplishes this function by providing compliance assistance, including voluntary compliance initiatives, and through compliance assurance efforts, such as occupational licensing and inspections. These compliance activities are described below.

## Compliance Assistance

Agency efforts to help ensure compliance include providing outreach and technical assistance to the regulated community. TNRCC staff provides training, confidential technical assistance, on-site visits, and workshops to teach and encourage businesses, industries, and government facilities to prevent pollution by conserving resources and incorporating waste minimization into their operations.

The agency specifically targets small businesses through site visits, workshops, and rule notifications. The agency also offers technical assistance to cities, counties, and other governmental entities. The text box, Assistance Activities for Fiscal Year 1999, summarizes TNRCC's efforts. ${ }^{3}$

The agency seeks to promote voluntary compliance by encouraging regulated entities to assess their compliance with laws and requirements by conducting environmental audits. In these audits, entities look at their own operations and have the opportunity to address any violations found. An audit cannot take the place of an inspection, but information generated through the audit is confidential, and may not be used against the company in civil or administrative proceedings. The program also provides immunity from civil and administrative penalties if violations are voluntarily

| Assistance Activities for Fiscal Year 1999 |  |
| :--- | ---: |
| On-site technical assistance visits related <br> to pollution prevention and recycling | 52 |
| Presentations and workshops on pollution <br> prevention and waste minimization | 94 |
| Regulated entities participating in <br> voluntary waste reduction programs | 3,507 |
| Pollution reduction projects | 796 |
| Small business and local government <br> assistance site visits | 225 |
| Hot line calls received | 3,356 |

disclosed and resolved in a timely manner. To receive immunity from penalties, the disclosed violation must not have created an injury or risk of injury, and the company must not have realized substantial economic benefit from its failure to comply. As a result of the Environmental Audit Program, TNRCC has received 1,151 notices of audits and 310 disclosures of violations as of May 2000.

## Compliance Assurance

The agency's compliance assurance efforts are designed to ensure that entities behave in a way that complies with the law, and is protective of human health and the environment. These efforts include occupational licensure to ensure the competence of environmental professionals and inspections to ensure the operational standards of regulated entities.

Occupational Licensure - The agency licenses, certifies, and registers environmental professionals who work in occupations that may affect

| Occupational Licenses ${ }^{4}$ |  |
| :--- | ---: |
| Type | Number |
| Water Operators | 12,533 |
| Municipal Solid Waste Technicians | 1,015 |
| On-site Sewage Facility Installers | 5,990 |
| Backflow Prevention Assembly <br> Testers | 4,010 |
| Customer Service Inspectors | 2,408 |
| State II Vapor Recovery Facility <br> Representatives | 97 |
| Wastewater Operators | 9,607 |
| Landscape Irrigators | 3,979 |
| Underground Storage Tank <br> Installers | 1,378 |
| Leaking Petroleum Storage Tank <br> Corrective Action Managers | 1,824 |
| Residential Water Operators | 526 |
| Visible Emission Evaluators | 971 |
| TOTAL | 44,338 | environmental quality. Licensure assures that these professionals maintain the minimum educational and experience qualifications to perform their work in a way that prevents adverse impacts to human health and the environment. After an individual is licensed, most programs require periodic renewal and continuing education courses. When necessary, staff investigates complaints against licensees and initiates enforcement actions, which can include suspension or revocation of a license, and administrative penalties. The table, Occupational Licenses, lists the 12 licensing programs administered by the agency and the number of licensees in fiscal year 1999.

Inspections - The most visible way the agency can ensure that facilities follow permit requirements is to conduct on-site inspections. The agency's field staff conducts three types of inspections: annual, enforcement follow-up, and complaint response. TNRCC, through negotiation with EPA, and using its own criteria, such as compliance history and size of a facility, annually determines the number of inspections and targets the types of facilities to inspect. TNRCC regional offices use this information in making determinations for which sites to inspect. Regional staff conducted 105,867 inspections in fiscal year 1999. ${ }^{5}$ Appendix F, TNRCC Inspections and Compliance Activities - Fr 1999, summarizes the major types of inspection and compliance activities and gives the number of each conducted in fiscal year 1999.

In addition to routine inspections, inspections of regulated facilities can be initiated through complaints. The agency conducted 7,430 investigations as a result of complaints in fiscal year 1999, approximately a third of which were for nuisance odors.

If an annual or complaint inspection reveals evidence of noncompliance, the agency conducts follow-up inspections to ensure that compliance is achieved after deficiencies have been noted. The agency also conducts follow-up inspections to ensure compliance with enforcement orders issued by the Commission.

## ENFORCEMENT

Enforcement is the primary deterrent against violating state or federal environmental regulations, and provides a mechanism to ensure violations are appropriately addressed and corrected. The agency initiates enforcement action in response to violations found during an inspection to bring violators into compliance with permit requirements. The flowchart, TNRCC Enforcement Process, illustrates the basic enforcement steps.

During an inspection, an inspector notes all violations discovered and may issue a Notice of Violation. Generally, for less serious violations that did not result in a release to the environment, an entity has 14 days to come into compliance without being subject to enforcement action. If the entity does not meet that time frame, the agency issues a Notice of Violation which formally states the violations found and the matter proceeds to enforcement. Regional staff issued 7,592 notices in fiscal year 1999. ${ }^{6}$

If a violation resulted in a release to the environment, or if the facility does not correct the violation, TNRCC will issue a Notice of Enforcement, informing the entity that formal enforcement action has been initiated. For all but the least serious violations, the agency begins the enforcement process even if the violator is able to correct the alleged violation in a timely manner.

Recently, regional offices have assumed greater enforcement powers. Each regional office has an Enforcement Coordinator who assesses the likelihood of a settlement and the complexity of the proposed enforcement action to decide whether regional staff or the Enforcement Division in Austin will handle the case. Regional staff handles those cases that are likely to settle. This process allows for quick settlement and negotiations, which do not involve attorneys, and enables a company to work with the inspector who is most familiar with the site, in a more informal setting.

TNRCC initiates
enforcement action to ensure that violators are brought into compliance and that violations are corrected.

## TNRCC Enforcement Process



Staff uses two types of agreed enforcement orders to address violations. The first type of order is typically used for less serious violations, does not include an admission of guilt, and does not become part of a facility's compliance history. Through this order, TNRCC can offer a deferral of up to 20 percent of an administrative penalty if a settlement is reached within 60 days. The second type of order is used for more serious violations and contains findings of fact and conclusions of law that detail the case against the alleged violator. ${ }^{7}$ In addition, violations listed in a findings order become part of the facility's compliance history.

TNRCC sends a draft agreed order to the alleged violator explaining any assessed fines, required corrective actions, and a time frame to correct the violations. The entity has 60 days to reach an agreement with the agency and pay the fine. After an agreement is reached, Commission approval is required before issuing the agreed order.

In negotiating an agreed order, the violator may choose to perform a supplemental environmental project as part of the settlement. Supplemental environmental projects allow entities to use a portion of their penalties to support projects that enhance the quality of the environment in the community where the violation occurred instead of paying penalties to the State's General Revenue Fund. A violator in an enforcement action negotiates with TNRCC staff to determine the specifics of the project and its cost as a portion of the administrative penalty. Supplemental environmental projects cannot be used to bring a violator into compliance or remediate harm. The table, Supplemental Environmental Projects, provides information on the amount of money spent on projects and the number of projects initiated since fiscal year 1996.

| Supplemental Environmental Projects ${ }^{\mathbf{8}}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 9 9 6}$ | 1997 | 1998 | 1999 |
| Expenditures | $\$ 4,280,025$ | $\$ 1,918,332$ | $\$ 1,044,049$ | $\$ 1,129,965$ |
| Number of <br> Projects | 11 | 36 | 41 | 44 |

The Enforcement Division in Austin handles enforcement cases that will not settle quickly or are complex, such as a case that involves both air and waste violations. The enforcement staff reviews the facts of the case and determines whether the allegations of violations are valid. If allegations are found to be valid, staff recommends that the agency pursue allegations are found to be valid, staff recommends that the agency pursue
an enforcement action. Where possible, the agency encourages prompt settlement of enforcement actions by extending a settlement offer through a draft order. An entity can sign the draft order or if the entity thinks it

Supplemental environmental projects allow violators to direct a portion of their penalty money to projects that benefit the environment.

> In addition to administrative enforcement action, violations can be addressed through civil and criminal litigation.

is inaccurate or unfair, a settlement conference is set up to discuss the concerns. If a settlement does not occur within 60 days, the Litigation Division will prepare for an administrative hearing.

The Executive Director starts the administrative hearing process by filing a petition, through TNRCC's Chief Clerk, with the State Office of Administrative Hearings ( SOAH ) that lays the groundwork for litigation. The petition lists the violations, proposes the penalty, and explains what the violator must do to correct the violations. To retain the right to a hearing before SOAH, the violator must file an answer to the petition within 20 days. Failing to respond, the violator loses the right to a hearing and the Commission issues a default order against the violator. If a facility fails to comply after the issuance of a default order, the agency refers the case to the Attorney General's Office for civil action.

If the violator responds and a settlement is not reached, the case goes to hearing. An administrative law judge drafts a proposal, based on the evidence presented, for consideration by the Commission. A judge can recommend a range of actions including no enforcement action, assessment of a penalty, or suspension or revocation of a permit. The Commission must approve all final enforcement orders issued by the agency and may deny or adjust penalty amounts, determined by agency staff. Administrative penalties can range up to a maximum of $\$ 10,000$ per violation per day.

The violator can appeal the Commission's decision on an enforcement order in district court. The Litigation Division coordinates civil enforcement litigation with the Attorney General's Office. The agency may also seek enforcement in criminal court in coordination with the Attorney General's Office and local prosecutors. Agency investigators assist in the prosecution of environmental crimes or conduct their own investigations. The table, Court Enforcement Actions summarizes the results of both civil and criminal enforcement actions since fiscal year 1996.

| Court Enforcement Actions $^{9}$ |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | 1996 | 1997 | 1998 | 1999 |  |
| Civil | Judgments | 44 | 42 | 47 | 42 |  |
|  | Civil Penalties | $\$ 12,098,160$ | $\$ 8,892,514$ | $\$ 19,470,368$ | $\$ 2,841,593$ |  |
|  | Cases with <br> Convictions | 9 | 9 | 8 | 11 |  |
|  | Entities <br> Convicted | 9 | 25 | 11 | 14 |  |
|  | Assessed <br> Penalties | $\$ 2,587,217$ | $\$ 5,654,988$ | $\$ 317,350$ | $\$ 197,827$ |  |

The table, Enforcement Statistics, summarizes enforcement activities taken by TNRCC since fiscal year 1996. The table provides information on activities conducted before the issuance of an enforcement order, such as the number of draft orders issued, pending actions, and cases

| Enforcement Statistics ${ }^{10}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enforcement Action | 1996 | 1997 | 1998 | 1999 |
| Notice of Violations. | 7,592 | 12,129 | 13,418 | 12,332 |
| Pending Formal Action for TNRCC Enforcement Orders | 1,048 | 691 | 876 | 869 |
| Compliance Achieved without Issuance of an Agency Order | 857 | 508 | 540 | 502 |
| Actions Initiated by Executive Director | 863 | 907 | 696 | 951 |
| Administrative Enforcement Orders | 666 | 666 | 546 | 662 |
| Administrative Penalties Assessed | \$6,866,540 | \$4,055,143 | \$4,643,974 | \$3,955,297 |
| Penalties Collected | \$5,654,537 | \$2,896,159 | \$3,727,509 | \$3,731,831 |
| License Suspensions or Revocations | 3 | 7 | 5 | 3 |
| Permit or Registration Revocations | 1 | 7 | 0 | 0 |

resolved informally. It also shows formal enforcement actions like administrative penalties, enforcement orders, suspensions, and revocations.

## MONITORING

TNRCC's monitoring activities, such as sampling, surveying, and analysis, support its core regulatory functions. Monitoring can help the agency assess the effectiveness of its permitting, compliance, and enforcement processes in protecting the quality of the state's air and water. For example, monitoring can help TNRCC determine the compliance status of a facility during a complaint investigation, or whether certain regions meet federal air quality standards. The agency's staff collects and interprets data to determine the causes, nature, levels, and behavior of air and water pollution. TNRCC's monitoring efforts focus primarily on air and water.
$\underline{\text { Air }}$ - The agency operates a statewide air monitoring network of more than 120 fixed and mobile air monitoring stations. The stations measure the amount of sulfur dioxide, carbon monoxide, nitrogen oxide, ozone, lead, and particulate matter in accordance with federal air monitoring requirements. Numerous sites also monitor for volatile organic

> TNRCC collects water quality data from more than 700 monitoring sites located throughout the state.

> TNRCC works with local governments and the regulated community to develop plans to bring areas into compliance with federal clean air standards.
compounds and meteorological conditions. Data collected from these monitoring stations are continuously transmitted via the Internet for use by the public. ${ }^{11}$ In addition to fixed and mobile monitoring stations, TNRCC maintains a fully equipped meteorological unit for forecasting ozone action days, and can conduct aircraft-based air monitoring to help understand the movement of pollution. The agency also operates a laboratory in Austin to process air samples collected from monitoring stations and field staff.

Water - Water quality monitoring activities involve collecting water samples and maintaining a database of surface water quality data from the more than 700 monitoring sites located throughout the state: The agency works with contractors, river authorities, and federal and local entities to collect water, sediment, and biological samples. The agency evaluates the physical, chemical, and biological characteristics of water bodies in relation to human health concerns, ecological conditions, and designated uses. The agency uses this data to develop, assess, and revise water quality standards, to justify wastewater permit limits, and to identify impaired and threatened water bodies. TNRCC's Houston laboratory supports these efforts by analyzing water, wastewater, soil, sediment, sludge, and tissue samples.

## ANALYSIS AND ASSESSMENT

TNRCC's environmental analysis and assessment activities support the agency's core regulatory functions by performing long-range environmental planning. To this end, agency staff determines environmental trends in each region of the state, evaluates data for use in decisionmaking, and administers federally-required planning programs for air and water. Primary efforts include developing state implementation plans for bringing nonattainment areas into compliance with federal clean air standards and determining total maximum daily loads that measure the amount of pollutants a water body can receive and still be suitable for certain designated uses. TNRCC's analysis and assessment functions also include providing technical assistance and grant funding to local governments for various environmental programs, and providing expertise on Texas-Mexico border environmental issues. The following material highlights the agency's analysis and assessment activities.

State Implementation Plans - State implementation plans are required by the federal Clean Air Act for areas not meeting any National Ambient Air Quality Standards. These nonattainment areas include HoustonGalveston, Dallas-Fort Worth, Beaumont-Port Arthur, and El Paso. Each area must have a plan that details its specific air quality problems and how they will be addressed to bring the area into compliance with federal standards. TNRCC staff works with local governments and the regulated
community to develop plans that must be adopted by the Commission and approved by EPA. The plans must contain air monitoring data, inventories of air pollution, photochemical modeling, and plans to control future emissions. If the State does not meet deadlines to complete a plan, or if a plan is not approved, EPA can impose penalties, such as requiring new industries to reduce emissions by a two-to-one ratio compared to current pollution levels, and restricting federal highway funds. See the text box, Houston-Galveston Area State Implementation Plan, for more details on a proposed plan in Texas.

## Total Maximum Daily Load Program -

 The federal Clean Water Act requires states to identify water bodies that exceed pollution levels, known as total maximum daily loads, for designated uses such as drinking, recreation, and fishing. Agency staff works with local entities, such as river authorities, to determine if a water body does not meet state and federal water quality standards and should be listed as impaired. TNRCC has identified 200 impaired water bodies in Texas.
## Houston-Galveston Area State Implementation Plan

The Houston-Galveston area exceeds federal air standards for ground-level ozone and is classified by EPA as a severe nonattainment area. Ground-level ozone is a reactive form of oxygen that has adverse health affects. In the presence of sunlight, ozone is produced by a chemical reaction of:

- nitrogen oxides (from automobiles, construction equipment, industrial processes, and fossil fuel-burning power plants), and
- volatile organic compounds (fuel vapors and refinery and petrochemical plant emissions).
Exceeding the federal air standard more than three times over any three year period results in being classified as a nonattainment area.

The Houston plan could require many measures to reduce ozone levels, including:

- expanding vehicle emissions testing,
- lowering vehicle speed limits,
- requiring the use of cleaner gasoline,
- reducing industrial emissions by 90 percent,
- banning construction equipment operation during morning hours, and
- using more electric powered ground vehicles at airports and shipping ports.

Texas first submitted a plan to EPA in 1972 and it has been revised several times. The current Houston plan details control measures to reduce ozone levels and is due to the EPA by December 2000. The Houston area has until 2007 to meet the federal standards to avoid sanctions, such as the loss of federal highway funds.

Once a water body is listed as impaired, TNRCC must develop an implementation plan that establishes pollution level standards, controls point and nonpoint pollution sources, and promotes activities to restore the water body to its designated use. The agency coordinates the development of implementation plans with local stakeholders, a task it anticipates completing in 2008. EPA reviews and approves these implementation plans, but as yet, imposes no time limits or sanctions relating to when they must be developed and carried out. See the text box, Bosque River Total Maximum Daily Load Implementation Plan, for more details on a plan in Texas.

Other Activities - TNRCC provides technical assistance to councils of governments on municipal, industrial, and hazardous waste planning. Agency staff also administers grants and contracts equaling $\$ 24.7$ million.

## Bosque River Total Maximum Daily Load Implementation Plan

The Bosque River flows into Lake Waco, the public water supply for Waco and surrounding communities. Several sources of pollution enter the Bosque River, such as wastewater effluent from treatment plants, agricultural run-off, and animal waste run-off from approximately 130 dairies. Elevated levels of fecal coliform and phosphorus from animal waste have made the river unsuitable for swimming. In addition, elevated levels of phosphorus and lower levels of dissolved oxygen in Lake Waco threaten drinking water quality and aquatic life.

The Bosque River plan was started in 1998, and TNRCC intends to have a draft plan by Spring of 2000 . The plan will focus on reducing phosphorus levels to restore the recreational use of the Bosque River.

Grants and contracts with local entities include:

- $\$ 12.2$ million for ground water monitoring, nonpoint source programs, and Clean Rivers programs;
- $\$ 11$ million for municipal solid waste planning; and
- $\$ 1.5$ million for air quality programs in regions of the state that are close to violating federal clean air standards.

In addition, TNRCC supports programs related to TexasMexico environmental issues, and provides expertise on how to reduce pollution along the border. Agency staff assists in implementing projects in border areas, which have included creating an inventory of illegal dumping sites to aid enforcement; assessing the condition and needs of local wastewater, drinking water, and solid waste systems; and cooperating with Mexican officials to enforce cross-border regulations on the shipping of hazardous waste.

[^10]
## Appendices



## Appendix A Major Events in Natural Resource Protection

1913 The Irrigation Act creates the Texas Board of Water Engineers to establish procedures for determining surface water rights.

1945 The Legislature authorizes the Texas Department of Health to enforce drinking water standards for public water supply systems.

1953 The Legislature establishes the Texas Water Pollution Control Advisory Council, in the Department of Health, to begin considering pollution-related issues.

1957 The Legislature creates the Texas Water Development Board to forecast water supply needs and provide funding for water supply and conservation projects.

1961 The Texas Pollution Control Act establishes the Texas Water Pollution Board, eliminating the Advisory Council and creating the first independent state agency for pollution control.

1962 The Texas Board of Water Engineers becomes the Texas Water Commission, with additional responsibilities for water conservation and pollution control.

1963 Congress enacts the Clean Air Act.
1965 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. In the same year, 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.

1967 The Texas Water Quality Act establishes the Texas Water Quality Board, assuming all functions of the Texas Water Pollution Control Board.

1969 The Texas Solid Waste Disposal Act authorizes the Texas Water Quality Board to regulate industrial waste and the Texas Department of Health to regulate municipal solid waste.

1972 Congress passes the Clean Water Act.
1973 The Legislature removes the Texas Air Control Board from the Department of Health, making it an independent state agency.

1974 Congress enacts the Safe Drinking Water Act.
1976 Congress passes the Resource Conservation and Recovery Act governing the disposal of all types of solid and hazardous wastes.

1977 The functions of the three existing water agencies are transferred to the newly-created Texas Department of Water Resources, in an effort to consolidate the state's water programs.

## Appendix A Major Events in Natural Resource Protection

1980 Congress enacts the Comprehensive Environmental Response, Compensation, and Liability Act, better known as Superfund, to provide funding for the cleanup of contaminated sites.

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.

1985 The Legislature dissolves the Department of Water Resources and transfers regulatory enforcement to the recreated Texas Water Commission, and planning and finance responsibilities to the recreated Water Development Board.

1989 The Texas Radiation Control Act authorizes the Department of Health to license the disposal of radioactive waste.

1992 Texas Water Commission acquires responsibility for drinking water, municipal solid waste, and the licensing of radioactive waste disposal from the Department of Health.

1993 The Legislature consolidates the Texas Water Commission and the Texas Air Control Board to create the Texas Natural Resource Conservation Commission.

1999 The Legislature transfers the functions of the Texas Low-Level Radioactive Waste Disposal Authority to TNRCC.

## Appendix B Summary of Major Federal Environmental Laws

## Clean Air Act

Enacted in 1963, the Clean Air Act is the comprehensive federal law regulating air pollution from area, stationary, and mobile sources. The goal of the law is to protect human health and the environment from emissions that pollute the atmosphere. The Act required the U.S. Environmental Protection Agency (EPA) to establish minimum national air quality standards and for all states to achieve these standards by 1975. States not meeting the minimum standards are required to develop comprehensive plans for reducing harmful air emissions. The Act also established a permit system for all major sources of air pollution.

Congress amended the Act in 1977, primarily to set new dates for achieving EPA's minimum air quality standards, since many areas of the country had failed to meet the original law's deadlines. The Clean Air Act was amended again in 1990 to establish new standards for continuing problems such as acid rain, ground-level ozone, stratospheric ozone depletion, and toxic air pollutants.

The Clean Air Act delegates much authority for regulating air emissions to individual states, allowing them to develop and implement plans to achieve minimum air quality standards. States may also administer their own permitting systems for pollution sources as long as their permitting procedures are as strict as those established in the Clean Air Act. TNRCC performs these functions for the state. Texas receives limited federal funding to administer its permit programs.

## Clean Water Act

Enacted in 1972, the Clean Water Act is the principal law governing pollution of the nation's surface waters. The goal of the Act is to protect and restore the physical, chemical, and biological integrity of all water bodies so that they are fishable and swimmable. The Act strengthens water quality standards, makes the discharge of pollution without a permit illegal, encourages the use of best available pollution control technology, and provides funding for the construction of sewage treatment plants.

The Act was significantly amended in 1977 and 1987 to focus more on toxic pollutants, provide additional funding for sewage treatment plants, support state and local efforts to control polluted runoff, and create programs to protect certain estuaries.

The Clean Water Act allows the EPA to delegate its authority for permitting, administering, and enforcing aspects of the law to state governments, as long as state procedures are as strict as those established in the federal law. TNRCC performs these functions for the state. For example, Texas recently received authority from EPA to implement the Texas Pollutant Discharge Elimination System which regulates, through a permitting process, discharges of pollutants into surface waters. Texas receives federal funding for these programs.

# Appendix B Summary of Major Federal Environmental Laws 

## Safe Drinking Water Act

Enacted in 1974, the Safe Drinking Water Act is the principal federal legislation governing the provision of drinking water in the United States. The goal of the Act is to ensure and protect public health by establishing comprehensive national standards for safe drinking water. The law requires EPA to set limits on certain contaminants, both chemical and microbiological, in drinking water. EPA is also required to set water-testing schedules and operating procedures for public water systems.

Congress amended the Act in 1986 and again in 1996. The 1986 amendments named 83 drinking water contaminants that must be regulated. The 1996 amendments require states to ensure that new and proposed drinking water systems achieve compliance with applicable standards, and that existing systems have enough capacity to meet their current and future needs.

The Safe Drinking Water Act identifies responsibilities of federal and state governments and of drinking water utilities. The Act also allows individual states to set and enforce their own drinking water standards as long as they are as strict as EPA's standards. TNRCC performs these functions for the state by inspecting water utilities for compliance with drinking water standards, and reviewing and approving construction plans for new facilities. The Texas Department of Health also plays a role by testing water samples from public drinking water systems. Texas receives federal funding for these programs.

## Resource Conservation and Recovery Act

Enacted in 1976, the Resource Conservation and Recovery Act was the first comprehensive federal effort to address the safe management of all types of solid and hazardous wastes. For municipal solid waste, the Act requires states to develop solid waste management plans, prohibits open dumping, and requires disposal methods which comply with EPA regulations. For hazardous waste, the Act establishes a "cradle to grave" tracking, permitting, and disposal system. The law also contains underground storage tank provisions. TNRCC regulates the management of hazardous and non-hazardous waste in Texas in accordance with this Act, and receives federal funding for regulation of hazardous waste.

## Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)

Enacted in 1980, the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, establishes broad federal authority to respond to releases of hazardous substances that may endanger public health or the environment. The Act also created a tax on chemical and petroleum industries, to be used as a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites, or Superfund sites. TNRCC complies with this Act by identifying Superfund sites in the state and administering the clean up of these sites using federal funding.

## Appendix C

| TNRCC Fee Revenues - FY 1999* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fund | Activites Supported by Fee | Fee Sources | Fees Per Fund | Amount (Millions) |
| Petroleum Storage Tank Remediation | Clean up of leaking petroleum storage tanks, and enforcement actions. | Bulk delivery of petroleum products. | 1 | \$157.7 |
| Clean Air | Permitting, monitoring, and enforcement of air emissions sources. State Implementation Plan development. Vehicle emissions inspection programs. | Air permits, emissions, and motor vehicle inspections. | 7 | \$78.9 |
| Waste Management | Regulation of industrial solid and hazardous waste. <br> Licensing of radioactive waste disposal. | Facilities that generate, treat, store, or dispose of municipal/industrial solid and hazardous waste. | 20 | \$35.3 |
| Water Resource Management | Water quality monitoring and enforcement. Edwards aquifer permitting, TPDES program, and regulation of water districts. | Wastewater treatment inspections, Edwards Aquifer applications, and water quality assessments. | 20 | \$24.9 |
| Hazardous and Solid Waste Remediation | Regulation of industrial solid and hazardous waste remediation. Clean up of hazardous waste, emergency response, and administering the Superfund program. | Disposal of industrial solid and hazardous waste, and sales of vehicle batteries. | 4 | \$16.4 |
| Solid Waste Disposal | Solid waste management activities, permitting, enforcement, and technical assistance. | Solid waste disposal and permitting, and sludge disposal or land application. | 8 | \$22.5 |
| General <br> Revenue | Wastewater management and water quality inspections. | Wastewater permitting, on-site septic facilities, and pollution control equipment reviews. | 12 | \$5.5 |
| Used Oil <br> Recycling | Registration and regulation of used oil recyclers. | Sales of automotive oil. | 1 | \$1.4 |
| Occupational Licensing | Licensing and regulation of occupations such as landscape irrigators, waterworks operators, and petroleum storage tank specialists. | Licensing and certification activities. | 9 | \$1.5 |
| Water Master Administration | Watermaster operations including water rights oversight, and water planning. | Holders of water rights in river basins. | 2 | \$1 |
| TOTAL |  |  | 84 | \$345.1 |

*Includes $\$ 1$ million in appropriated receipts.

## Appendix D

## Equal Employment Opportunity Statistics

## 1996 to 1999

In accordance with the requirements of the Sunset Act, ${ }^{1}$ the following material shows trend information for the agency's employment of minorities and females. The agency maintains and reports this information under guidelines established by the Texas Commission on Human Rights. ${ }^{2}$ In the charts, the flat lines represent the percentages of the statewide civilian labor force that African Americans, Hispanic Americans, and females comprise in each job category. These percentages provide a yardstick for measuring agencies' performance in employing persons in each of these groups. The dashed lines represent the agency's actual employment percentages in each job category from 1996 to 1999. Finally, the number in parentheses under each year shows the total number of positions in that year for each job category.

## State Agency Administration





The agency generally exceeded the civilian labor force percentages for this job category.

## Professional



Hispanic American


Female


The agency generally exceeded the percentages for African Americans and Hispanic Americans, but despite improvements, fell below the civilian labor force percentage for females.

## Appendix D

Technical


Hispanic American


Female


While the agency made improvements in the percentage of African Americans in this job category, the percentage of Hispanic Americans has fallen and the percentage of females remains below the civilian labor force standard.

## Paraprofessional



The agency exceeded the civilian labor force percentage for females by a wide margin. However, despite improvements, the percentages of African Americans and Hispanic Americans remain below the standard.

## Appendix D

## Administrative Support



While the agency exceeded the civilian labor force percentages for African Americans and Hispanic Americans, the percentage of females has fallen below the standard in recent years.

## Skilled Craft



Although the agency exceeded the civilian labor force percentage for Hispanic Americans, it lags below the standard for African Americans and females.

[^11]
## Appendix E

## Historically Underutilized Businesses Statistics

1996 to 1999
The Legislature has encouraged state agencies to use Historically Underutilized Businesses (HUBs) to promote full and equal opportunities for all businesses in state procurement. In accordance with the requirements of the Sunset Act, ${ }^{1}$ the following material shows trend information for the agency's use of HUBs in purchasing goods and services. The agency maintains and reports this information under guidelines in the General Services Commission's enabling statute. ${ }^{2}$ In the charts, the flat lines represent the goal for each purchasing category, as established by the General Services Commission. The dashed lines represent the agency's actual spending percentages in each purchasing category from 1996 to 1999. Finally, the number in parentheses under each year shows the total amount the agency spent in each purchasing category.


The agency fell below the state goal from 1996 to 1999.


The agency fell far below the state goal from 1996 to 1997, but improved in 1998 and 1999.

## Appendix E

Commodities


The agency significantly exceeded the state goal from 1996 to 1999.

[^12]
## Appendix F

| TNRCC Inspections and Compliance Activities - FY 1999* |  |  |
| :---: | :---: | :---: |
| Type | Reason for Inspection | Inspections Conducted |
| AIR |  |  |
| Air | Ensure air quality through activities such inspecting facilities and vehicle emissions. | 11,985 |
| Stage II | Ensure that gasoline vapors are controlled or reduced during fueling of vehicles in nonattainment areas. | 5,560 |
| WATER |  |  |
| Public Water Supply | Ensure the safe delivery of drinking water from utilities. | 5,448 |
| Sludge | Ensure that solids resulting from wastewater treatment are adequately treated before application of disposal. | 220 |
| Water Quality | Ensure the proper treatment and disposal of wastewater to protect ground and surface waters. | 1,590 |
| Petroleum Storage Tank | Ensure safety and protection of the state's groundwater resources by inspecting the installation of new tanks, appropriate removal or closure of old tanks, cleanup of leaking tanks, and that leak detection systems are installed and operating adequately. | 5,550 |
| Animal Feeding Operation | Ensure that solid wastes and wastewater are managed appropriately to protect ground and surface waters. | 946 |
| On-site Sewage Facility | Ensure the safe disposal of domestic wastewater and protection of surface and groundwater resources through plan reviews, permits, and inspections of on-site septic systems. | 2,559 |
| Water Rights | Ensure an adequate supply of water to meet the domestic, livestock, and irrigation needs of the Rio Grande Valley and South Texas areas. | 37,857 |
| Edwards Aquifer protection | Ensure protection of the Edwards Aquifer through staff review of abatement plans and inspections. | 753 |
| Municipal Utility Districts | Ensure that construction of wastewater tratment and drinking water supply facilities is performed in accordance with approved plans and specifications. | 1,593 |
| WASTE |  |  |
| Municipal Solid Waste | Ensure the safe handling or disposal of municipal solid waste and medical waste. | 735 |
| Used Oil | Ensure the safe handling or disposal of used oil and used oil filters. | 227 |
| Tires | Ensure the safe handling or disposal of waste tires. | 738 |
| Industrial and Hazardous Waste | Ensure the safe handling and disposal of industrial and hazardous solid wastes. | 1,496 |
| OTHER COMPLIANCE ACTIVITIES |  |  |
| Emergency Response | Ensure a mechanism to respond to environmental emergencies such as discharges, spills, or unplanned air releases. | 435 |
| Dam Safety | Ensure the safe construction of dams and the safety of existing dams. | 75 |

[^13] Conservation Commission to Sunset staff, November 1999, and additional information provided January 18, 2000

## Appendix G

## Staff Review Activities

The Sunset staff engaged in the following activities during the review of TNRCC.

- Worked extensively with TNRCC executive management and staff at the Austin headquarters and with staff in the Lubbock, Amarillo, Houston, Arlington, and Austin regional offices.
- Met individually with TNRCC Commission members and attended public meetings of the Commission and advisory committees.
- Met with the Speaker's Office, State Auditor's Office, Legislative Budget Board, Comptroller's Office, legislative committees, and key legislators' staff.
- Toured regulated facilities, and met with regulated entities and public interest groups in Austin, Lubbock, Amarillo, Canyon, Dalhart, Houston, Freeport, Sealy, Dallas, Midlothian, and Fort Worth.
- Met with representatives of local governments, including officials from the Cities of Dallas, Houston, Fort Worth, Lubbock, Pearland, and Plainview; representatives from Harris County; staff from the Houston-Galveston Area Council and North Central Council of Governments; and with officials from the Port of Houston and Dallas/Fort Worth International Airport.
- Attended contested case hearings at the State Office of Administrative Hearings, and a public meeting on a proposed solid waste disposal facility.
- Visited with officials from the Environmental Protection Agency on funding, policies, initiatives, and compliance and enforcement issues related to environmental regulation.
- Solicited written comments from state and local interest groups, including those representing the regulated community, the public interest, and local governments, regarding their ideas and opinions about the State's environmental regulation role.
- Researched and surveyed other states regarding the structure and programs of agencies with common functions.
- Reviewed agency documents, reports, and rules, state and federal statutes, legislative reports, Attorney General opinions, previous legislation, literature on environmental regulation, other states' information, and information available on the Internet.


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[^0]:    1 Texas Health \& Safety Code Ann. ch. 341, sec. 341.0315 ; ch. 361 , sec. 361.084 ; ch. 361, sec. 361.088 (f); ch. 361 sec. 361.089; ch. 382 , sec. 382.0518 (c); ch. 382 , sec. 382.055 (d); ch. 382 , sec. 382.056 (o); ch. 401 , sec. 401.110 ; ch. 401 , sec. 401.112 ; Texas Water Code Ann. ch. 26, sec. 26.028 (d); ch. 26, sec. 26.0281 ; ch. 26, sec. 26.040 (h); and ch. 27, Sec 27.051.
    2 Texas Water Code Ann. ch. 7, sec. 7.053
    3 30 TAC sec. 305.66 (f), 30 TAC sec. 281.21 (d)
    430 TAC Sec. $116.011,30 \mathrm{TAC} \mathrm{sec} .55 .31(\mathrm{~b})(1)(\mathrm{G})$
    s 30 TAC sec 305.64 (f)
    ${ }^{6}$ Texas Natural Resource Conservation Commission, Penalty Policy, available at http://www.tnrcc.state.tx.us/admin/topdoc/rg/253; INTERNET.
    7 Texas Natural Resource Conservation Commission, Summary of the Consolidated Compliance and Enforcement Database System, (Austin, Tex., March, 2000).
    ${ }^{8}$ Memorandum from Anne Dobbs, Enforcement Division, Texas Natural Resource Conservation Commission, to John Young, Enforcement Division, Texas Natural Resource Conservation Commission, March 16, 2000.
    9 The agency is unable to provide the information prior to fiscal year 1997.
    ${ }^{10}$ Texas Natural Resource Conservation Commission, Strategic Plan: State of the Texas Environment, Fiscal Years 1999-2003, Volume 2, (Austin, Tex., June 1998) p. 1.
    ${ }^{11}$ More information is available at http://www.state.nj.us/dep/special/silver/index.html; INTERNET.
    ${ }^{12}$ More information is available at http://www.epa.state.il.us/regulatory-innovation/part-187.html; INTERNET.
    ${ }^{13}$ More information is available at http://www.deq.state.or.us/od/p2/p2.html; INTERNET.

[^1]:    ${ }^{1}$ Texas Administrative Code, Title 30, ch. 101, Sec. 101.1.C Sec. 101.1
    2 Memorandum from John Young, Director, Field Operations Division, Texas Natural Resource Conservation Commission, to Regional Managers, Program Managers, Team Leaders, and Inspection Staff, Texas Natural Resource Conservation Commission, February 28, 1996.
    ${ }^{3}$ Texas Administrative Code, Title 30, ch. 101, Sec. 101.1.C Sec. 101.6
    4 Texas Administrative Code, Title 30, ch. 101, Sec. 101.1.C Sec. 101.7
    3 : Sunset staff analysis of data from the Texas Natural Resource Conservation Commission Point Source Database:
    6 Ibid.
    7. Texas Natural Resource Conservation Commission "Summary of Consolidated Compliance and Enforcement Database System," (Austin, Tex., March 2000)
    8 Texas Natural Resource Conservation Commission, Upset Maintenance Rules, available at http://www.tnrcc.state.tx.us/oprd/rule_lib/ pc99050.pdf: INTERNET.
    ${ }^{9}$ Texas Natural Resource Conservation Commission, "Executive Summary, Implementation of Upset/Maintenance Rules." (Austin, Tex., February 1, 2000)
    ${ }^{10}$ Interview with Mark Vickery, Division Director, Field Operations, Texas Natural Resource Conservation Commission and Jennifer Sidnell, Program Support, Field Operations, Texas Natural Resource Conservation Commission. Also Texas Natural Resource Consérvation Commission electronic mail to Sunset staff, March 13, 2000.
    ${ }^{11}$ Sunset staff examined the top five repeat offenders from air, municipal solid waste, industrial hazardous waste, and wastewater programs in Texas Natural Resource Conservation Commission regions 4, 6, 12, and 13. The evaluation concentrated on repeat offenders who received enforcement follow-up inspections during fiscal year 1999.
    ${ }^{12}$ The agency does provide prior notice of an enforcement follow-up if a site is unattended upon inspection and access is not possible. In such cases, the inspector will contact the operator and provide short notice or request a site visit for the next day without disclosing the purpose for the inspection.
    ${ }^{13}$ Sunset staff survey of Texas Natural Resource Conservation Commission staff in Region 4-Arlington, Region 6-El Paso, Region 12-Houston, and Region 13-San Antonio, March, 2000.
    ${ }^{14}$ Sunset staff analysis of data from the Texas Natural Resource Conservation Commission Point Source Database.
    is lbid.
    ${ }^{16}$ Data provided by Texas Natural Resource Conservation Commission Region 12-Houston, March 2000.

[^2]:    1 Information provided to Sunset staff by Cindy Stanislawski, Field Operations Division, Texas Natural Resource Conservation Commission, March, 2000.
    2 Texas Health \& Safety Code Ann. ch. 421.
    3 Information provided by Steven Gibson, Laboratory Inspector, Compliance Support Division, Quality Assurance Section, Texas Natural Resource Conservation Commission (March 2000).
    ${ }^{4}$ Memorandum from Steven Gibson, Laboratory Inspector, Compliance Support Division, Quality Assurance Section, Texas Natural Resource Conservation Commission to Carol Batterton, Director of Compliance Support Division, Texas Natural Resource Conservation Commission, March 2, 2000.
    5 Additional information about the National Environmental Laboratory Accreditation Conference is available at http://www.epa.gov/ttn/nelac/; INTERNET.
    6 U.S. Environmental Protection Agency, National Environmental Laboratory Accreditation Conference, NELAC Standards: Chapter 1 Program Policy and Structure (Washington, D.C., July 1999), p. 6.
    7 National Conference of State Legislators, "Final Report Submitted to the U.S. Environmental Protection Agency: National Environmental Laboratory Accreditation Conference Legislative Survey" (Denver, Co., November 1997), p. 7.

[^3]:    1 Texas Natural Resource Conservation Commission, Strategic Plan: State of the Texas Environment, Fiscal Years 1999-2003, Volume 2, (Austin, Tex., June 1998), p. 1.
    2 Information provided to Sunset staff by Jim Price, Senior Atmospheric Scientist, Technical Analysis Division, Texas Natural Resource Conservation Commission, April 2000.
    3 Telephone interview with David Allen, Chemical Engineering Professor, University of Texas at Austin, Austin, Texas, February 9, 2000; and Telephone interview with Jim Thomas, Director, Technical Analysis Division, Texas Natural Resource Conservation Commission, Austin, Texas, April 20, 2000.
    4 Telephone interview with Richard Dobbs, Texas Hazardous Waste Research Center, Beaumont, Texas, April 24, 2000.
    $s$ Interview with Janet Pichette, Chief Engineer, Toxicology and Risk Assessment Division, Texas Natural Resource Conservation Commission, Austin, Texas, February 7, 2000.
    6 Sonoma Technology Inc., Assessment of the Health Benefits of Improving Air Quality in Houston. Texas: Executive Summary, STI-998460-1875-DFR2 (Petaluma, Ca., April 1999); and Greater Houston Partnership, "Air Pollution Control in Texas-Long Range Research Needs," Houston, Tex., April 2000.
    3 Texas Natural Resource Conservation Commission, Permanent Rule Adoption: 30 TAC 116, March 21, 1999; and Memorandum from Victoria Hsu, Director, New Source Review Permits Division, Texas Natural Resource Conservation Commission, to New Source Review Permits Division, March 15, 1999.
    8 Presentation by Mel Vargas, Texas Maximum Daily Load Team Leader, Texas Natural Resource Conservation Commission, Austin, Texas, October 29, 1999.
    ${ }^{9}$ Texas Natural Resource Conservation Commission, Developing Total Maximum Daily Load Projects in Texas: A Guide for Lead Organizations, Document no. GI-250 (Austin, Tex., June 1999) pp. 1-2.
    ${ }^{10}$ Texas Health and Safety Code Ann. ch. 161, sec. 161.0211 (a) and (b).

[^4]:    1 Texas Natural Resource Conservation Commission Resolution on Public Participation, April 22, 1996. Available at http:// www.tnrcc.state.tx.us/homepgs/participation.html; INTERNET.
    2 Texas Government Code Ann., ch. 572, sec. 572.001.
    ${ }^{3}$ Texas Water Code Ann., ch. 5, sec. 5.271.
    4 Texas Natural Resource Conservation Commission, Office of Public Assistance overview presented to Sunset staff October 8, 1999.
    5 The Office recently participated in the development of the Risk Reduction Rules and rules implementing House Bill 801. However, in order to weigh in on rulemaking and other policy decisions, the Public Interest Counsel would be forced to forego participation in individual permit decisions and enforcement actions.
    ${ }^{6}$ Texas Utility Code Ann., ch. 12, sec. 12.053.
    T Texas Water Code Ann., ch. 5, sec. 5.053(b) incorporates by reference 40 CFR 123.25(c).
    8 Texas Government Code Ann., ch. 2110.
    930 Texas Administrative Code 5.5, "The composition of advisory committees shall comply with the requirements of Texas Government Code, Chapter 2110."
    ${ }^{10}$ The complete report is available at http://www.tnrce.state.tx.us/air/care/minrpt.html; INTERNET.
    ${ }^{11}$ Office of the Attomey General of Texas, Attorney General Comyn Open Records Letter Ruling OR99-3162.

[^5]:    1 Texas Water Code Ann., ch. 5, sec. 5.115.
    2 Texas Water Code Ann., ch. 5, sec. 5.228.
    ${ }^{3}$ Texas Natural Resource Conservation Commission, Business Process Review, Techlaw (Austin, Tex., May 1, 1998). pp. 4-7.
    4 In the Matter of the Application of TXI Operations, L.P., SOAH Docket No. 582-97-0499, pp. 6264-6265:
    "... I represent the Executive Director of the Texas Natural Resources Conservation Commission...it's organized into two different groups...there's the Commissioners who will make the decision about this matter...Then there's the Executive Director, who are the staff members who review applications and look at complaints and those kinds of things...and you're aware that I represent the Executive Director, but I do not represent the Commissioners?"
    s Telephone interview with Suzi Ray McClellan, Public Utility Counsel, Austin, Texas, April 28, 2000.
    ${ }^{6}$ Texas Senate Research Center, Bill Analysis of H.B. 2062 by Van de Putte (Harris), 75th Legislature, (Austin, Tex., May 14, 1997).
    7 Telephone interview with Scott Sherman, Senior Policy Advisor, Railroad Commission of Texas, Austin, Texas, April 28, 2000.

[^6]:    Public participation in enforcement actions is limited to notice and comment.

[^7]:    ${ }^{1}$ Texas House of Representatives, Joint Interim Committee on TNRCC Funding Interim Report (Austin, Tex., September 16, 1996).
    ${ }^{2}$ Texas Senate, Senate Finance Interim Committee, Texas Natural Resource Conservation Commission Briefing Report, Funding the Programs of TNRCC (Austin, Tex., September, 1997).
    ${ }^{3}$ Texas Natural Resource Conservation Commission, Summary of Proposed Recommendations (Austin, Tex., June 10, 1998) provided to Sunset staff, February 15, 2000.
    ${ }^{4}$ Texas Natural Resource Conservation Commission, Petroleum Storage Tank Program Funding Issue, provided to Sunset staff, February 15, 2000.
    s Texas Natural Resource Conservation Commission, TNRCC Clean Air Account (151) - State Funds Only (Austin, Tex., March, 2000).
    ${ }^{6}$ Ibid.
    7 Texas Natural Resource Conservation Commission, Air Emissions Rates and Air Emissions Caps data provided to Sunset staff, February 15, 2000.
    ${ }^{8}$ Texas Natural Resource Conservation Commission, Wastewater Permit Flow and Annual Average Fee data provided to Sunset staff, March 15, 2000.
    ${ }^{9}$ Ibid. Industrial permits shown are type I flows only.
    ${ }^{10}$ Texas Natural Resource Conservation Commission, Statutory Caps on $\cdot$ Environmental Fees, draft (Austin, Tex., February 15, 2000).
    ${ }^{11}$ Texas Natural Resource Conservation Commission, Public Water Supply System Connections and Fee Rate data provided to Sunset staff, February 15, 2000.
    ${ }^{12}$ Ibid.
    ${ }^{13}$ Texas Natural Resource Conservation Commission, Fee Billing and Collection: A Select Review, Office of Internal Audit (Austin, Tex., December 1995). p. 9.
    ${ }^{14}$ Texas Natural Resource Conservation Commission, Financial Administration Division, "Detailed Aged Accounts Report, UST Registration Fee," fiscal years 1996-99. Austin, February 2000 (computer printout).
    ${ }^{15}$ Texas Natural Resource Conservation Commission, "Solid Waste Disposal Fee Payers - By Reporting Method Fiscal Year 1996 to 2000," data provided to Sunset staff, February, 2000.
    ${ }^{16}$ Texas Natural Resource Conservation Commission, Financial Administration Division, "Fee Credits, Debts and Refunds Processed for Fiscal Year 1999" (Austin, Tex., March 23, 2000).
    ${ }^{17}$ Texas Natural Resource Conservation Commission, Compliance, Evaluation and Audit Section, 2000 Risk Assessment Summary (Austin, Tex., February 2000).

[^8]:    1 Texas Natural Resource Conservation Commission, Strategic Plan: State of the Texas Environment, Fiscal Year 1999-2003, Volume 1, (Austin, Tex., June 1998), p. 5.
    ${ }^{2}$ Texas Department of Transportation, Testimony before the House Appropriations subcommittee on General Government, March, 2000.
    ${ }^{3}$ Texas Water Commission/Texas Air Control Board, Fourth Report on Measures, November 4, 1993. Texas Natural Resource Conservation Commission, Output and Efficiency Measures Report: Fourth Quarter Report, Fiscal Year 1999, (Austin, Tex., 1999).
    4 Information provided by Texas Natural Resource Conservation Commission staff to Sunset staff on budget information for the dam safety, floodplain management, weather modification, occupational licensing, water utility ratemaking, and aboveground storage tank programs, May 10, 2000.
    ${ }^{5}$ R. Steven Brown, The States Protect the Environment, ECOS, (Summer 1999). The major federal environmental acts include the Clean Air Act, Clean Water Act, RCRA, FIFRA, and Safe Drinking Water Act.
    ${ }^{6}$ Council of State Governments, State Air Pollution Control Program Survey, 1999.

[^9]:    ' These recommendations were evaluated for licensing, certification, or registration of the following 12 occupations or activities under TNRCC jurisdiction:
    Water operators; Municipal solid waste technicians; On-site sewage facility installers; Backflow prevention assembly testers; Customer service inspectors; Stage II vapor recovery facility representatives; Wastewater operators; Irrigators; Underground storage tank installers; Leaking petroleum storage tank corrective action managers; Residential water operators; and Visible emission evaluators.
    ${ }^{2}$ Texas Water Code 26.457 , relating to license renewal for the installation, repair, or removal of underground storage tanks, and Texas Water Code 34.009 , relating to renewal of Irrigator certificate of registration, substantially comply with the standard across-the-board provision. Not applicable to other activities.
    ${ }^{3}$ Texas Water Code 26.455, relating to examination of applicants for license to install, repair, or remove underground storage tanks, and Texas Water Code 34.007 , relating to examination of applicants for Irrigator certificate of registration, substantially comply with the standard across-the-board provision. Not applicable to other activities.
    ${ }^{4}$ Texas Water Code 34.008 provides for reciprocity for licensed Imigators. Apply the standard across-the-board recommendationi regarding endorsement to the Commission's general authority in Texas Water Code, Chapter 7 for other licensed occupations.
    ${ }^{5}$ Update Texas Water Code 34.009 , regarding renewal of Irrigator certificate of registration, and Texas Health and Safety Code 366.076 regarding renewal of on-site sewage facility installer registration.
    ${ }^{6}$ Apply the standard across-the-board recommendation to the Commission's general authority in Texas Water Code, Chapter 7 for all licensed occupations.
    ${ }^{7}$ Texas Health and Safety Code 361.027, Texas Health and Safety Code 366.013, Texas Water Code 26.3573(j), Texas Water Code 26.454, and Texas Water Code 34.006 relating to Municipal solid waste technicians, On-site sewage facility installers, Leaking petroleum storage tank corrective action managers, Underground storage tank installers, and Irrigators, substantially comply with the standard across-the-board provision.

[^10]:    1 Texas Natural Resource Conservation Commission, Industrial and Hazardous Waste: Rules and Regulations for Small Quantity Generators, publication no. RG-243 (Austin, Tex., December 1999).
    ${ }_{2}$ More information about Texas Natural Resource Conservation Commission's Risk Reduction Rule and corrective action is available at http:// www.tnrcc.state.tx.us/permitting/trrp.htm; INTERNET.
    3 Information provided to Sunset staff by Texas Natural Resource Conservation Commission, December 1999.
    4 Information provided to Sunset staff by Texas Natural Resource Conservation Commission, October 6,1999.
    5 The total number of 105,867 compliance inspections includes all types of inspection work performed by the agency. This includes those inspections the agency does not normally report to the Legislative Budget Board (LBB) because LBB's definition does not included those inspections.
    6 Information provided to Sunset staff by Jennifer Sidnell, Field Operations Division, Office of Compliance and Enforcement, Texas Natural Resource Conservation Commission, January 18, 2000.

    7 Finding of fact is a determination made by the trier of fact as to the factual issue based on the evidence presented in a case. Conclusion of law is statement of the law applicable to a case in view of the facts found to be true.
    8 Texas Natural Resource Conservation Commission, Final Annual Enforcement Report-Fiscal Year 1999 available at http:// www.tnrcc.state.tx.us/enforcement/AER/FY99/index.html; INTERNET.
    9 Facsimile from Paul Sarahan, Director of Litigation Division, Office of Legal Services, Texas Natural Resource Conservation Commission to Sunset staff, December 14, 1999. Texas Natural Resource Conservation Commission, Final Annual Enforcement Report-Fiscal Year 1999 available at http://www.tnrcc.state.tx.us/enforcement/AER/FY99/index.html; INTERNET.
    ${ }^{10}$ Memorandums to Sunset staff from Machelle Pharr, Chief Financial Officer, Texas Natural Resource Conservation Commission, Austin, Texas, November 20, 1999 and December 17, 1999. Facsimiles to Sunset staff from Ann McGinley, Director of Enforcement Division, Office of Compliance and Enforcement, Texas Natural Resource Conservation Commission, Austin, Texas, December 14 and $20,1999$. Texas Natural Resource Conservation Commission, Enforcement Report to the Commission for August 1999 (November 19, 1999 Commission Work Session), Enforcement Report to the Commission to the Commission for August 1998 - Final Fiscal Year 1998 Report (October 8, 1998 Commission Work Session), Enforcement Report to the Commission for August 1997 (October 2, 1997 Commission Work Session), Enforcement Report to the Commission for August 1996 (October 23, 1996 Commission Work Session). Reports available at http:// www.tnrce.state.tx.us/enforcement/enforce/enf_reports.html; INTERNET.
    ${ }^{11}$ More information about the Texas Natural Resource Conservation Commission's real-time monitoring efforts is available at http:// www.tnrce.state.tx.us/air/monops/index.htm; INTERNET.

[^11]:    1 Texas Government Code Ann., ch. 325, sec. 325.011(9)(A).
    2 Texas Labor Code Ann., ch. 21, sec. 21.501 (formerly required by rider in the General Appropriations Act).

[^12]:    ${ }^{1}$ Texas Government Code Ann., ch. 325, sec. 325.011(9)(B) (Vernon 1999)..
    ${ }^{2}$ Texas Government Code Ann., ch. 2161. (some provisions were formerly required by rider in the General Appropriations Act).

[^13]:    *Electronic mail from Jennifer Sidnell, Field Operations Division, Office of Compliance and Enforcement, Texas Natural Resource

