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STRATEGIC PLAN

FISCAL YEARS 2013–2017

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SFR-035/13

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

STRATEGIC PLAN

FISCAL YEARS 2013–2017

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

July 2012

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C O N T E N T S

Part I. Vision, Mission, and Goals

Statewide Vision and Mission 3
The Mission of Texas State Government 3
The Philosophy of Texas State Government 3
Relevant Statewide Goals and Benchmarks 4
Agency Vision and Mission 4

Part II. External and Internal Assessment

Chapter 1. Historical and Organizational Overview ... 7
- Overview of Agency Scope and Functions 7
- Historical Perspective 16
- Key Functions 22
- Agency Workforce 24
- Organizational Structure 27

Chapter 2. Geographic Aspects 31
- Location of the Agency 31
- Affected Populations 32
- Special Regions Served 32

Chapter 3. Organizational Aspects 41
- Capital Assets and Improvements 41
- Facility Improvements 41
- Historically Underutilized Businesses (HUBs) .. 42
- Financial Status and Outlook 43
- Economic and Population Forecast 46
- Technological Developments 47

Chapter 4. Impact of Federal, State, and Legal Actions 51
- Federal Authority 51
- The 82nd Legislature 57
- Significant Court Cases 61

Part III. Current Activities and Opportunities for Improvement

Air Quality Issues 85
Water Quality and Quantity Issues 103
Waste Issues 113
Other Key Issues 120

Part IV. Strategic Planning Structure

Goals, Objectives, and Strategies, Fiscal Years 2014–2015 131

Part V. Technology Resource Planning

Technology Assessment Summary 141
Technology Initiative Assessment and Alignment ... 143

Appendices

A. Agency Planning Process 149
B. TCEQ Organizational Chart 151
C. Outcome Projections, Fiscal Years 2013–2017 153
D. TCEQ Performance Measures and Definitions, Fiscal Year 2014 157
E. TCEQ Workforce Plan, Fiscal Years 2013–2017 217
- Key Factors Facing the Agency 217
- Current Workforce Profile (Supply Analysis) 220
- Future Workforce Profile (Demand Analysis) 224
- Gap Analysis 225
- Strategy Development 228

F. TCEQ Survey of Employee Engagement, 2011 231
- Agency Participation 231
- Areas of Strength 231
- Areas of Concern 232
- Climate Analysis 233
- Next Steps: Interpretation and Intervention 234

Tables

1. Statutory Citations for TCEQ Authority 7
2. TCEQ Workforce Categories and Average Tenure 24
3. TCEQ Workforce Compared to Available Statewide Labor Force 26
4. TCEQ Employee Retirements, FYs 2007–2011 27
5. Vehicle Replacement Goals 41
6. Statewide HUB Goals and TCEQ Performance 43
7. Economic and Population Forecast for Texas and the U.S. 46
8. Federal Statutes for Which Responsibility Is Authorized to the TCEQ 51
9. Agency Technology Initiatives and Agency Objectives 143
E.1. Projection of TCEQ Employees Eligible for Retirement 217
E.2. TCEQ Workforce Compared to Available Statewide Labor Force 221
E.3. Critical Workforce Skill Clusters within the TCEQ Offices 224
E.4. Critical Skills Checklist and Gap Analysis 225

Figures

1. Location of TCEQ Employees, FY 2011 24
2. Population at the TCEQ by Job Classification Series, FY 2011 25
3. Ethnicity of TCEQ Workforce, FY 2011 25
4. Gender of TCEQ Workforce, FY 2011 26
5. Typical Distribution of LLRW Generated in the Texas Compact 115
6. Superfund Sites in Texas 116
7. Total Number of Administrative Orders Issued, by Fiscal Year 124
E.1. TCEQ Workforce by Office, FY 2011 220
E.2. Location of TCEQ Employees, FY 2011 220
E.3. Ethnicity of TCEQ Workforce, FY 2011 221
E.4. Gender of TCEQ Workforce, FY 2011 221
E.5. TCEQ Black Workforce, FY 2011 221
E.6. TCEQ Hispanic Workforce, FY 2011 222
E.7. TCEQ Female Workforce, FY 2011 222
E.8. Education Requirements of TCEQ Employees, FY 2011 222
E.9. Population at the TCEQ by Job Classification Series, FY 2011 223
E.10. TCEQ Employee Turnover Rate, FYs 2001–2011 223
E.11. TCEQ Employee Tenure by Race, FY 2011 223
E.12. TCEQ Employee Tenure by EEOC Job Category, FY 2011 224
E.13. TCEQ Strategies to Address Skill Gaps 228
F.1. Survey Response Rate, 2011 231
F.2. Survey Response Rate, 2006–2012 231
F.3. 2011 Survey: Climate Analysis 233

Part I.

Vision, Mission, and Goals

STATEWIDE VISION AND MISSION *3*

THE MISSION OF TEXAS STATE GOVERNMENT *3*

THE PHILOSOPHY OF TEXAS STATE GOVERNMENT *3*

RELEVANT STATEWIDE GOALS AND BENCHMARKS *4*

AGENCY VISION AND MISSION *4*

Statewide Vision and Mission

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

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

The Mission of Texas State Government

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

The Philosophy of Texas State Government

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

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

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

Relevant Statewide Goals and Benchmarks

Natural Resources and Agriculture

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

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

Benchmarks

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

Agency Vision and Mission

The Mission of the TCEQ

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

The Philosophy of the TCEQ

To accomplish our mission, we will:

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

EEO Commitment

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

Part II.

External and Internal Assessment

CHAPTER 1. HISTORICAL AND ORGANIZATIONAL OVERVIEW *7*
Overview of Agency Scope and Functions | Historical Perspective
Key Functions | Agency Workforce | Organizational Structure

CHAPTER 2. GEOGRAPHIC ASPECTS *31*
Location of the Agency | Affected Populations | Special Regions Served

CHAPTER 3. ORGANIZATIONAL ASPECTS *41*
Capital Assets and Improvements | Facility Improvements
Historically Underutilized Businesses (HUBs) | Financial Status and Outlook
Economic and Population Forecast | Technological Developments

CHAPTER 4. IMPACT OF FEDERAL, STATE, AND LEGAL ACTIONS *51*
Federal Authority | The 82nd Legislature | Significant Court Cases

C H A P T E R 1

Historical and Organizational Overview

Overview of Agency Scope and Functions

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

Statutory Authority

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

Table 1. Statutory Citations for TCEQ Authority

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

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Water Code, Chapter 13 Water Rates and Services	This chapter establishes a comprehensive system of regulating water and sewer utilities to ensure that rates, operations, and services are provided that are just and reasonable to consumers and utilities.
Texas Water Code, Section 16.236 Construction of Levees	This section requires the commission to review levee projects and adopt rules.
Texas Water Code, Chapter 26 Water Quality Control	This chapter requires the commission to ensure that the quality of water in the state is maintained consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, and the operation of existing industries, taking into consideration the economic development of the state, and to encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems. The chapter authorizes the commission to establish permitting, management, and monitoring programs to support such protection and addresses the regulation of underground and above-ground storage tanks.
Texas Water Code, Chapter 27 Injection Wells	This chapter establishes a policy of the state to maintain the quality of its fresh water and establishes a permitting system for injection-well activities not authorized by a rule of the commission or subject to the jurisdiction of the Railroad Commission.
Texas Water Code, Chapter 28 Drilled or Mined Shafts	This chapter establishes permitting requirements for drilled or mined shafts.
Texas Water Code, Chapter 30 Regional Waste Disposal	This chapter gives the commission authority to exercise continuing supervision over regional plans for water quality management control, and abatement of pollution under the chapter.
Texas Water Code, Chapter 31 Subsurface Excavation	This chapter gives the commission authority to issue a permit to allow a person to drill, excavate, or otherwise construct a subsurface excavation.
Texas Water Code, Chapter 32 Subsurface Area Drip Dispersal Systems	This chapter establishes permitting requirements for subsurface area drip dispersal systems.

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Table 1. Statutory Citations for TCEQ Authority (continued)

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

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Table 1. Statutory Citations for TCEQ Authority (continued)

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

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

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

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 366 On-Site Sewage Disposal Systems	This chapter requires that the commission regulate the construction, installation, alteration, repair, or extension of on-site sewage systems (OSSFs). The commission is authorized to enact fees, issue permits, and impose penalties in its efforts to eliminate and prevent health hazards in these systems. The commission is required to license or register persons who install and maintain OSSFs.
Texas Health and Safety Code, Chapter 367 On-Site Wastewater Treatment Research	This chapter establishes a funding mechanism for on-site wastewater treatment research. Section 367.010 directs the commission to collect a $10 fee on all on-site wastewater treatment permit applications and enforce the collection of the fee by certain local governments. The fee is deposited to the credit of the water resources management account.
Texas Health and Safety Code, Chapter 369 Plastic Containers	This chapter requires that the appropriate symbol be placed on plastic containers to indicate the resin used to produce the container and provides for civil penalties. The commission is required to maintain a list of the appropriate symbols and may approve other symbols.
Texas Health and Safety Code, Chapter 370 Toxic Chemical Release Reporting	This chapter requires facilities that use toxic chemicals in excess of a threshold amount to submit a "toxic chemical release" form and accompanying fee to the agency. The purpose of the form is to inform the public and communities surrounding the facilities.
Texas Health and Safety Code, Chapter 371 Used Oil Collection, Management, and Recycling	This chapter authorizes the commission to adopt rules governing the registration and reporting requirements of used-oil handlers other than generators. The chapter also authorizes the commission to adopt rules and procedures necessary to implement the used-oil recycling program. and includes registration and reporting requirements for used-oil filter transportation, storage, and generation and requires the commission to adopt rules relating to financial responsibility.
Texas Health and Safety Code, Chapter 372 Plumbing Fixture Standards	This chapter requires the TCEQ to maintain a list of manufacturers for plumbing fixtures that meet the standards set out in the statute.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 374 Dry Cleaner Environmental Response	This chapter establishes an environmental regulation and remediation program for dry-cleaning facilities and dry-cleaning drop stations in Texas. Under the program, operating dry-cleaning facilities and drop stations pay registration and solvent fees into a fund that is then used by the commission to investigate and clean up eligible contaminated dry-cleaning sites.
Texas Health and Safety Code, Chapter 375 Removal of Convenience Switches	This chapter establishes a convenience-switch recovery program under which the commission provides regulatory incentives as well as collects and reports on data received regarding the recovery of convenience switches.
Texas Health and Safety Code, Chapter 382 Texas Clean Air Act	This chapter is established to safeguard the state's air resources from pollution, consistent with the protection of public health, general welfare, and physical property, including the aesthetic enjoyment of air resources by the public and the maintenance of adequate visibility. The chapter establishes a comprehensive permitting system applicable to a variety of facilities that emit pollutants.
Texas Health and Safety Code, Chapter 384 Area Emission Reduction Credit Organizations (AERCO)	This chapter allows the establishment of organizations to promote the creation, trading, and tracking of emission-reduction credits in nonattainment areas. The commission has oversight authority to approve initial establishment, withdraw approval, dissolve or renew, and audit area emission-reduction credit organizations.
Texas Health and Safety Code, Chapter 386 Texas Emissions Reduction Plan (TERP)	This chapter establishes a number of program components aimed at reducing air emissions, including mobile-source incentives and energy efficiency requirements. The primary responsibility of the TCEQ is to implement the Emissions Reductions Incentive Program by awarding grants for the installation of emission-control equipment.
Texas Health and Safety Code, Chapter 387 Air Quality Research Support Program	This chapter establishes authority to contract with a nonprofit organization or institution of higher education to establish and administer a program to support research related to air quality.
Texas Health and Safety Code, Chapter 390 Clean School Bus Program	This chapter establishes a grant program, administered by the TCEQ, to reduce the exposure of schoolchildren to diesel exhaust in and around school buses through technology that reduces diesel emissions.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Chapter 391 New Technology Implementation for Facilities and Stationary Sources	This chapter establishes a grant program, administered by the TCEQ, to give incentives for the implementation of emissions-reduction technologies for facilities and stationary sources.
Texas Health and Safety Code, Chapter 392 Texas Clean Fleet Program	This chapter establishes a grant program, administered by the TCEQ, to give incentives for the replacement or repowering of diesel-powered fleet vehicles with alternative-fueled or hybrid vehicles.
Texas Health and Safety Code, Chapter 393 Alternative Fueling Facilities	This chapter establishes a grant program, administered by the TCEQ, to provide incentives for the establishment of fueling facilities in the air quality nonattainment areas for alternative fuels, including: biodiesel, natural gas, propane, hydrogen, electricity, and methanol (M85).
Texas Health and Safety Code, Chapter 394 Texas Natural Gas Vehicle Grant Program	This chapter establishes two new grant programs to be administered by the TCEQ: the Clean Transportation Triangle (CTT) Program and the Texas Natural Gas Vehicle Grant Program (TNGVGP). The CTT Program provides incentives for the establishment of natural-gas fueling facilities along the interstate highways connecting Houston, San Antonio, Fort Worth, and Dallas. The TNGVGP provides incentive funding for the replacement or repower of existing vehicles with natural-gas vehicles to be operated along the CTT highways and in the air quality nonattainment areas.
Texas Health and Safety Code, Chapter 401 Radioactive Materials and Other Sources of Radiation	This chapter authorizes a program that will ensure the effective regulation of sources of radiation for protection of the occupational and public health and safety and the environment, and will promote the orderly regulation (in the state, among states, and between the federal government and the state) of sources of radiation to minimize regulatory duplication. The chapter establishes a licensing and registration system applicable to persons who manufacture, produce, transport, own, process, or dispose of a source of radiation not exempted by law. The TCEQ has jurisdiction to regulate and license the recovery or processing of source material, the processing and disposal of by-product material, the commercial storage or processing of radioactive substances (except oil and gas NORM [naturally occurring radioactive material] waste), the disposal of radioactive substances (except oil and gas NORM waste), and low-level radioactive waste disposal sites.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Health and Safety Code, Section 753.008 Flammable Liquids	This section of Chapter 753 gives the TCEQ concurrent jurisdiction with the Texas State Board of Insurance regarding the inspection of initial installation and other administrative supervision of above-ground storage tanks. The TCEQ has the primary authority for inspection of initial installation of the tanks and is required to report all violations of the chapter in regard to such tanks to the state fire marshal for enforcement proceedings.
Texas Government Code, Section 2155.145 Certain Purchases by Texas Natural Resource Conservation Commission	This section delegates purchasing functions relating to Texas Health and Safety Code 361, Subchapters F and I.
Texas Government Code, Chapter 418	This chapter establishes the authority of the governor and the Texas Division of Emergency Management to prepare for and manage emergencies and disasters that affect the state, establishes state agencies as members of the State Emergency Management Council, and lays out responsibilities in emergencies.
Texas Government Code, Chapter 421	This chapter specifies TCEQ as a member of the Texas Homeland Security Council, and lays out responsibilities related to security and critical infrastructure protection.
Texas Local Government Code, Section 212.0101 Additional Requirements: Use of Groundwater	This subsection requires the TCEQ, by rule, to establish the appropriate form and content of a certification to be attached to a plat application under the section as well as requirements for certain plats to be transmitted to the Texas Water Development Board and any applicable groundwater conservation district.
Texas Local Government Code, Section 232.0032 Additional Requirements: Use of Groundwater	This subsection requires that the TCEQ, by rule, shall establish the appropriate form and content of a certification to be attached to a plat application under the section as well as requirements for certain plats to be transmitted to the Texas Water Development Board and any applicable groundwater conservation district.
Texas Local Government Code, Chapter 375 Municipal Management Districts in General	This chapter creates management districts to promote and benefit commercial development and commercial areas throughout the state and outlines the role and authority of the TCEQ in their creation.

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Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation and Chapter Title	Authority and Impact on Agency
Texas Natural Resources Code, Chapter 40 Oil Spill Prevention and Response Act of 1991	This chapter establishes the Texas General Land Office as the agency with primary response obligations for unauthorized oil spills, but includes provisions allowing other state agencies, such as the TCEQ, to carry out response and cleanup operations related to the unauthorized discharge of oil. Additionally, the TCEQ is a Natural Resource Trustee, and this chapter allows the Texas General Land Office, on behalf of the Natural Resource Trustees, to seek reimbursement from the federal oil-spill fund for damages to natural resources.
Texas Occupations Code, Chapter 1903 Irrigators	This chapter provides authority to license and regulate irrigators.
Texas Occupations Code, Chapter 1904 Water Treatment Specialists	This chapter provides authority to license and regulate water-treatment specialists.
Texas Tax Code, Section 11.31 Tax Pollution Control Property	This section creates a tax exemption for pollution-control equipment. The TCEQ is required to determine the applicability of the exemption and to establish rules to make such determinations.
Texas Tax Code, Section 26.045 Rollback Relief for Pollution Control Requirements	This section creates tax-rollback rate adjustments for pollution-control equipment. The TCEQ is required to determine the applicability of the adjustment and is required to establish rules to make such determinations.

Historical Perspective

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

Major Events in TCEQ History

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

During the 1990s, the Texas Legislature repositioned state agencies to make protecting natural resources more efficient by consolidating programs. This trend culminated in the creation of the Texas Natural Resource Conservation Commission in the fall of 1993 as a comprehensive environmental protection agency. Sunset legislation passed by the Texas Legislature in 2001 continued the agency until 2013 and changed its name to the Texas Commission on Environmental Quality. During the special session of

the 81st Legislature (2009), legislation was adopted amending the 2013 date to 2011.

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

1905 ■ The Legislature authorizes the creation of the first drainage districts.

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

1919 ■ The Legislature provides for the creation of freshwater supply districts.

1925 ■ The Legislature provides for the organization of water control and improvement districts.

1929 ■ The Legislature creates the first river authority (the Brazos River Authority).

1945 ■ Legislation authorizes the Texas Department of Health to enforce drinking-water standards for public water supply systems.

1949 ■ State legislation declares that groundwater is private property.

■ The Legislature creates underground water conservation districts.

1953 ■ The Legislature creates the Texas Water Pollution Control Advisory Council in the Department of Health as the first state body charged with dealing with pollution-related issues.

1956 ■ **The U.S. Congress passes the Water Pollution Control Act.**

■ Texas' first air quality initiative is established when the state Department of Health begins air sampling.

1957 ■ The Legislature creates the Texas Water Development Board to forecast water supply needs and fund water supply and conservation projects.

1959 ■ **The U.S. Congress passes the Atomic Energy Act.**

1961 ■ The Texas Pollution Control Act establishes the Texas Water Pollution Board and eliminates the Water Pollution Advisory Council, creating the state's first true pollution control agency.

■ A water-well drillers' advisory group is established.

■ The Injection Well Act is passed, authorizing the Texas Board of Water Engineers to regulate waste disposal (other than from the oil and gas industry) into the subsurface through injection wells.

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

■ The Texas Water Pollution Board adopts its first rules and regulations.

1963 ■ **The U.S. 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.

■ 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 (TWQB), assuming all functions of the Water Pollution Control Board. The TWQB adopts its first rules.

■ The Texas Air Control Board adopts its first air quality regulations.

1969 ■ Texas takes over most federal air-monitoring responsibilities in the state.

■ The Texas Solid Waste Disposal Act authorizes the TWQB to regulate industrial solid waste, and the Texas Department of Health to regulate municipal solid waste.

■ **A presidential order creates the U.S. Environmental Protection Agency (EPA).**

1970 ■ **The federal Clean Air Act is amended, requiring states to develop State Implementation Plans (SIPs).**

1971 ■ **The EPA adopts National Ambient Air Quality Standards (NAAQS).**

■ The Legislature first authorizes municipal utility districts.

- The Texas Air Control Board establishes an air permits program.

1972
- **The U.S. Congress passes the Clean Water Act.**
- The Texas Air Control Board submits its first SIP to the EPA. It also deploys the first continuous air-monitoring station.

1973
- The Legislature removes the Texas Air Control Board from the Department of Health, making it an independent state agency.

1974
- *Texas et al. v. the U.S. EPA* challenges the EPA's plan for controlling ozone in Texas.
- The Texas Air Control Board completes deployment of the first continuous monitoring network.
- **The U.S. Congress passes the Safe Drinking Water Act.**

1976
- **The U.S. Congress passes the Resource Conservation and Recovery Act (RCRA) to govern the disposal of all types of solid and hazardous wastes.**

1977
- **The federal Clean Air Act and Clean Water Act are amended.**
- The Legislature creates the Texas Department of Water Resources (TDWR) by combining the three existing water agencies. A six-member board is set up as a policy-making body for the new agency. The Texas Water Development Board (TWDB) is retained as the legislative and policy-making body. The Water Rights Commission is renamed the Texas Water Commission and sits as a quasi-judicial body that rules on permits. The Water Quality Board is abolished.

1979
- The Texas Air Control Board submits revisions of the SIP to the EPA.

1980
- **The U.S. Congress passes the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), better known as the Superfund bill, to provide funding for the cleanup of contaminated sites.**
- **The U.S. Congress passes the Low-Level Radioactive Waste Act.**
- The Texas Air Control Board submits to the EPA a plan to address lead pollution.

1982
- Texas receives authorization from the EPA for underground injection control.

1984
- **The U.S. Congress passes the Hazardous and Solid Waste Amendments to the RCRA.**
- Texas receives final RCRA authorization from the EPA.

1985
- **The U.S. Congress passes amendments to the 1980 Low-Level Radioactive Waste Act.**
- The Legislature dissolves the Department of Water Resources and transfers regulatory enforcement to the recreated Texas Water Commission, and planning and finance responsibilities to the recreated Water Development Board.
- The Legislature moves the Water Rates and Utilities Services Program from the Public Utility Commission of Texas to the newly created Texas Water Commission.
- The Texas Air Control Board mobile sampling laboratory is first deployed.

1986
- **The U.S. Congress passes the Superfund Amendments and Reauthorization Act, reauthorizes CERCLA, and creates the Toxics Release Inventory.**
- **The U.S. Congress amends the Safe Drinking Water Act.**

1987
- **The U.S. Congress passes the Water Quality Act.**
- Texas establishes an EPA-approved state wellhead-protection program.

1989
- The Legislature expands and funds the Petroleum Storage Tank (PST) Program.
- The Texas Radiation Control Act authorizes the Texas Department of Health to license the disposal of radioactive waste.

1990
- **The U.S. Congress adopts the Clean Air Act Amendments.**
- **The U.S. Congress passes the Oil Pollution Act.**

1991
- The Texas Air Control Board is expanded to implement the 1990 federal Clean Air Act Amendments.
- The Legislature, in special session, creates the Texas Natural Resource Conservation Commission (TNRCC) to be effective Sept. 1, 1993. Preparation begins for the consolidation of the Texas Water Commission and the Texas Air Control Board into the TNRCC.

1992
- The Texas Water Commission acquires responsibility for drinking water, municipal solid waste, and the licensing of radioactive substances from the Texas Department of Health.
- The Water Well Drillers Board and the Board of Irrigators are merged into the Texas Water Commission.

1993
- The TNRCC begins operations, thereby consolidating for the first time regulatory programs for air, water, and waste.
- The Legislature adopts House Bill (HB) 1920, which establishes the Tax Relief for Pollution Control Property Program, to be administered by the TNRCC.

1995
- **The EPA establishes the Environmental Performance Partnership Grant (PPG) Program.** The PPG provides federal funds to states to administer environmental programs such as Section 106 Surface Water, Section 105 Air, Public Drinking Water, Section 319 Nonpoint Source, and the Resource Conservation and Recovery Act (RCRA).

1997
- The Legislature transfers regulation of water-well drillers from the TNRCC to the Texas Department of Licensing and Regulation.
- The Legislature returns oversight of uranium mining, processing, and by-product disposal to the Texas Department of Health.
- The TNRCC concludes a Performance Partnership Agreement with the EPA, allowing limited flexibility in federally funded program organization and funding. The aim of the agreement is to allocate resources most appropriately throughout Texas on a regional basis.
- The Legislature adopts Senate Bill (SB) 1, mandating water conservation planning for large water users and requiring development of drought contingency plans by public water suppliers.

1998
- The EPA delegates to Texas its portion of the National Pollutant Discharge Elimination System (NPDES) program.

1999
- The Legislature transfers the functions of the Texas Low-Level Radioactive Waste Disposal Authority to the TNRCC.
- The Legislature adopts HB 801, which modifies the permitting process for permits administered by the agency for which public notice and opportunity for a hearing are required. The legislation requires early public notice, encourages early public involvement, and requires substantive public comment and agency response. It also establishes criteria that would limit the scope of hearings by requiring referral of discrete issues that are in dispute and material to the decision of the commission. This process applies to permits issued by the agency under chapters 26 and 27 of the Texas Water Code and chapters 361 and 382 of the Health and Safety Code.

2001
- The agency is continued for 12 years under HB 2912, which includes a provision to change the TNRCC's name to the Texas Commission on Environmental Quality by Jan. 1, 2004.
- The Legislature transfers responsibility for environmental laboratory accreditation, and certification of residential water treatment specialists from the Texas Department of Health to the TNRCC.
- The Texas Environmental Health Institute is created by joint agreement between the TNRCC and the Texas Department of Health to identify health conditions related to living near a federal or state Superfund site.
- The Texas Emissions Reduction Plan (TERP) is established by the Legislature to

be administered by the TNRCC, the Comptroller, the Public Utility Commission of Texas, and the Texas Council on Environmental Technology.

2002
- The agency formally changes its name on Sept. 1 from the Texas Natural Resource Conservation Commission to the Texas Commission on Environmental Quality.

2003
- Under HB 1365, the Legislature provides a stable funding source for TERP program activities under the TCEQ and ends funding for TERP-related programs under the Comptroller and the Public Utility Commission of Texas.
- The Legislature establishes a program at the TCEQ to regulate and remediate dry-cleaning facilities with passage of HB 1366.
- Through HB 1567, the Legislature provides for the licensing of a facility for the disposal of low-level radioactive waste (LLRW) and establishes procedures for the agency to accept and assess license applications from businesses to dispose of LLRW.
- The Legislature passes HB 37, which transfers the technology research and development program within the TERP from the Texas Council on Environmental Technology to the TCEQ.
- The agency implements the Permit Time Frame Reduction project, designed to shorten the time it takes to review major uncontested permits.

2004
- The agency initiates the Environmental Monitoring and Response System, designed to improve the TCEQ's ability to measure environmental conditions in real time, notify the public of potential threats, and respond quickly and proactively.

2005
- The TCEQ undertakes comprehensive review and overhaul of the state's municipal solid waste regulations.
- The TCEQ begins a comprehensive review, including extensive public involvement, of the agency's enforcement process.
- The Legislature authorizes the Clean School Bus Program with passage of HB 3469.

2006
- The TCEQ reviews the extensive public comments on the agency's enforcement process. The commissioners adopt a number of significant revisions to the process, including a pilot field-citation program.
- The TCEQ adopts a major revision, streamlining, and improvement of state regulations on municipal solid waste.

2007
- The Legislature passes SB 1604, which transfers regulatory authority for commercial radioactive waste processing, uranium mining, and by-product disposal from the Department of State Health Services (DSHS, formerly Department of Health) to the TCEQ.
- SB 1604 also addresses the process for TCEQ review of a pending application submitted to DSHS for a by-product disposal facility proposed for Andrews County.
- In addition, SB 1604 addresses the TCEQ's underground injection control program for regulation of in situ uranium mining and requires the TCEQ to administer a new state fee for the disposal of radioactive wastes other than low-level radioactive waste.
- SB 1436 transfers the responsibility for the National Floodplain Insurance Program from the TCEQ to the TWDB.
- Passage of SB 12 extends the TERP through August 2013. It also expands the uses of TERP funds, including use by the Clean School Bus Program.
- SB 12 also amends the Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) to enhance its availability and increase grant amounts for the purchase of new vehicles.
- The Legislature extends the reimbursement program for leaking underground storage tanks from 2008 to 2012 and requires insurance companies to notify the TCEQ if the

owner of a petroleum storage tank has cancelled or failed to renew insurance coverage.

- The Legislature passes HB 2714, which requires computer manufacturers to establish recycling programs for computers of their own brand.
- The Legislature passes SB 3 and HB 3 and HB 4, which amend various sections of the Texas Water Code and set out a new regulatory approach for ensuring that surface water meets the environmental flow needs of river, bay, and estuary systems.
- The Legislature grants property owners the right to register and participate in the Dry Cleaner Remediation Fund and imposes additional fees and restrictions on the use of perchloroethylene.
- HB 3732 establishes incentives such as property tax exemptions and expedited permit processing for the use of clean coal, biomass, petroleum coke, solid waste, or new liquid-fuel technology in generating electricity.
- The TCEQ adopts the Texas BART (best available retrofit technology) rule, requiring emission controls for certain industrial facilities emitting air pollutants that contribute to regional haze.
- The Rio Grande Watermaster announces the receipt of more than 224,000 acre-feet of water from Mexico at the Amistad Reservoir near Del Rio, effectively eliminating Mexico's water debt to the United States.
- The governor submits to the EPA his recommendation that all areas of Texas meet the revised 24-hour standard under NAAQS for fine particulate matter ($PM_{2.5}$).

2008
- The TCEQ upgrades its electronic permitting system (ePermits) for submissions of applications for the stormwater general permit. After the program upgrade, usage rose from 22 to 53 percent.
- The TCEQ responds to the aftermath of Hurricane Ike and participates in a massive recovery effort.
- **The EPA revises the 1997 eight-hour ozone NAAQS of 0.08 parts per million (ppm) by lowering the standard to 0.075 ppm.**
- **The EPA proposes to lower the NAAQS standard for lead from the current 1.5 micrograms per cubic meter of ambient air.**
- As required by the federal Clean Air Act for all the states, the governor must provide to the EPA the list of areas that the state believes are not meeting the federal ozone standard. To assist the governor with this, the commission makes recommendations as to which areas did not meet the revised ozone standard.

2009
- **The governor submits to the EPA the list of areas in Texas that do not meet the 0.075 ppm eight-hour ozone standard.**
- HB 1796 extends TERP through 2019 and establishes the New Technology Implementation Program within TERP.
- SB 1759 establishes the Texas Clean Fleet Program within TERP.
- SB 361 requires water and sewer service providers to submit emergency preparedness plans to demonstrate their ability to provide emergency operations.
- HB 3547 gives additional enforcement authority to the TCEQ if an owner or operator of a dry-cleaning facility or drop station does not properly register as required under Texas statutes.

2010
- The TCEQ responds to record flooding in the Rio Grande area, performing essential duties to help control flooding and minimize damage to communities along the border.
- The agency enacts new performance standards for plumbing fixtures sold in Texas as mandated by HB 2667. The standards will help the state see an estimated water savings of 20 percent or more for each plumbing fixture that is installed.
- The TCEQ makes revisions to the state implementation plan (SIP) for the Houston-Galveston-Brazoria metropolitan area that

would reduce the highly reactive volatile organic compound (HRVOC) cap by 25 percent and bring the area into attainment with the 1997 eight-hour ozone standard.

- The agency implements rules to regulate volatile organic compound (VOC) emissions created from offset lithographic printing and letterpress printing.
- The TCEQ adopts EPA amendments to the Clean Air Interstate Rule (CAIR) that modify the control periods and heat inputs used to measure nitrogen oxides under this program.
- **The EPA enacts a number of final rules relating to greenhouse gas (GHG) emissions:**
  - GHG emission standards for light-duty vehicles
  - Mandatory reporting of GHGs from large sources and suppliers of GHGs
  - Regulation of GHG emissions for power plants, refineries, and large industrial plants under the Clean Air Act
- **The EPA adopts new one-hour standards for nitrogen dioxide at 100 parts per billion (ppb) and sulfur dioxide at 75 ppb.**

2011
- HB 451 requires the TCEQ to establish a "Don't Mess With Texas Water" program to prevent illegal dumping that affects surface waters of the state.
- HB 1981 modifies the TCEQ's current Air Pollutant Watch List (APWL) process, including changes to the requirements for publishing notices and allowing public comment. In addition, the bill requires a publicly available online database for emission events and legislative notification of releases that substantially endanger human health or the environment.
- HB 2694 continues the Texas Commission on Environmental Quality for 12 years, until 2023. It also makes changes to several program areas, such as focusing the Dam Safety Program on the most hazardous dams in the state, transferring the authority for making groundwater protection recommendations regarding oil and gas activities to the Railroad Commission, and increasing the maximum to $25,000 for almost all penalties and $5,000 for others, such as water-rate penalties.
- SB 20 and SB 385 establish three new grant programs under TERP: the natural gas vehicle rebate program, a program to fund natural gas fueling stations, and an alternative fueling facilities program.
- SB 329 creates a television-equipment recycling program. It includes shared responsibility among consumers, retailers, manufacturers, and the state government for recycling covered television equipment.
- SB 1134 prohibits the TCEQ from promulgating new or amending existing authorizations (permits by rule [PBRs] or standard permits [SPs]) for the oil and gas industry without performing a regulatory impact analysis (RIA) and extensive monitoring, and considering geographical limitations.
- SB 1258 allows the TCEQ to issue a PBR to enable counties or municipalities with a population of 10,000 or less to dispose of demolition waste from buildings that are abandoned or found to be a nuisance. Disposal can only occur on land that is owned by the county and would qualify for an arid exemption.
- The TCEQ responds to and manages the worst one-year drought that has occurred in Texas since records have been kept.

Key Functions

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

Operations

- *Permitting and Licensing Management*. Issuing, administering, renewing, and modifying permits, water rights, licenses, or certifications for organizations and individuals whose activities have some potential or actual environmental impact that must be formally authorized by the agency.
- *Public Assistance Management*. Responding to requests for information by external parties and conducting outreach with regard to agency obligations. Responding to complaints lodged by affected or interested parties, including addressing the cause of complaints and notifying the complainant of action taken.
- *Evaluation of Public Health Effects*. Assessing the impact on public health of toxic substance releases, transfers, and disposal.
- *Ambient Monitoring and Sampling, Laboratory Analysis*. Monitoring the current condition of a geographic area or natural resource often through sampling or surveys.
- *Technical Data Gathering, Management, and Analysis*. Providing scientific support for the design and implementation of specific strategies to address environmental improvements.
- *Compliance Inspections and Monitoring*. Monitoring the compliance of regulated entities through such activities as reviewing submitted reports and conducting site visits and inspections.
- *Release Identification and Reporting*. Identifying and reporting on activities, processes, emissions, and environmental impacts associated with the regulated community.
- *Violation and Enforcement Management*. Identifying, verifying, and tracking violations of regulations and initiating enforcement actions in response to violations.
- *Remediation Oversight*. Overseeing cleanups made by responsible parties, local authorities, and contractors, and ensuring that grants and funds authorized for cleanup reimbursements are disbursed appropriately.
- *Emergency Response*. Responding to environmental emergencies to coordinate evacuation, public-health protection, and spill cleanup.
- *Homeland Security*. Assisting in the planning, development, coordination, and implementation of initiatives to promote the governor's homeland security strategy, and to detect, deter, respond to and assist with recovery from disasters, both natural and human-caused.
- *Technical Assistance and Pollution Prevention*. Overseeing agency activities focused on helping a regulated facility achieve compliance, promote conservation, and reduce pollution voluntarily.
- *Air-Emissions Trading*. Tracking and verifying the trading of air-emissions credits to ensure that trading is done in compliance with the program charter.

Administration

- *Development of Regulations, Policies, and Procedures*. Creating rules and policies to guide agency activities.
- *Program Management*. Planning, reporting, and tracking of program activities.
- *Budget Development*. Preparing, modifying, and reporting the agency budget. Developing agency goals and objectives and planning the allocation of personnel and financial resources.
- *Grant and Contract Administration*. Administering grants and contracts awarded to or by the agency.
- *Legal Support*. Analyzing and interpreting statutes and regulations, and representing the TCEQ in formal and informal settings.
- *Bankruptcy Administration*. Pursuing debtors who have filed for bankruptcy protection in federal courts to recover claims owed to the TCEQ.
- *Fund Administration, Accounting, Disbursements, and Payroll*. Managing funds limited to specific uses and processing payroll.
- *Revenue Estimation*. Forecasting and monitoring agency revenues and funding.
- *Purchasing and Asset Management*. Administering the purchase, location, use, and status of all agency assets.

- *Personnel Management, Recruitment, and Training.* Providing and supporting a skilled workforce for the agency.
- *Information-Resource Management.* Defining, designing, and maintaining agency information systems (automated or manual).
- *Records Management.* Managing physical document files (maps, microfiche, manual files, etc.).

Agency Workforce

Size and Composition

The TCEQ has an authorized workforce of 2,761.2 budgeted full-time equivalent (FTE) positions for fiscal year 2012. The average age of TCEQ employees is 46.19 years, compared to 45.08 years as reported in the *Strategic Plan: Fiscal Years 2011–2015*. The average employee tenure with the agency as of Aug. 31, 2011, was 10.18 years, a slight increase from the 9.63 years reported in the previous strategic plan. The average employee tenure with the State of Texas as of Aug. 31, 2011, was 13.31 years.

Officials/administrators, professionals, and administrative support make up more than 95 percent of the entire workforce. The remaining workforce consists of technical positions (Table 2).

Table 2. TCEQ Workforce Categories and Average Tenure

Job Category	TCEQ Workforce* FY 2011		Average Tenure (in years)
Official/Administrator	306	10.26%	13.65
Professional	1,946	65.26%	9.70
Technical	143	4.80%	11.07
Administrative Support	587	19.70%	9.72
Agency Total Workforce	2,982		

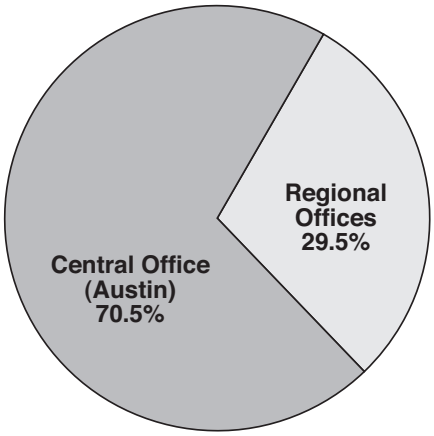
* Actual head count, not FTEs; includes separations. Total does not equal 100% due to rounding.
Data Source: Human Resources Information System, as of 8/31/11.

The TCEQ supplemented its workforce in fiscal 2011 with a total of 100 contracted staff in order to provide vital program support, manage workloads, and perform various information technology functions as a means for meeting agency goals and objectives.

Location of Employees

The TCEQ employs staff in the Central Office, located in Austin, and in 16 regional offices throughout the state. As of Aug. 31, 2011, 790 employees–or 29.5 percent of the total workforce–were located in the regional offices (see Figure 1). In an effort to facilitate delivery of the agency's services at the point of contact and to increase efficiencies, 113 (14.3%) of the regional employees were matrix-managed staff who work in a regional office but are supervised from the Central Office.

Figure 1. Location of TCEQ Employees, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

Human Resources Policies and Procedures

The Human Resources and Staff Development (HRSD) Division of the TCEQ administers the agency's workforce through routine review and revision of human resources (HR) policies and procedures, ensuring compliance with state and federal laws on equal

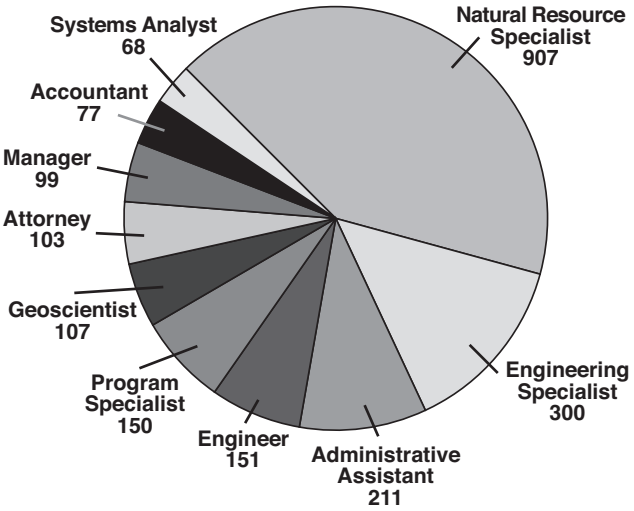
opportunity and fair labor practices, and offering policy guidance to employees. Legislative changes are incorporated into HR policies and standard operating procedures, as necessary, every two years. The next regular legislative session will begin Jan. 8, 2013.

Frequently Used Job Classifications

The TCEQ uses a wide variety of job classifications to carry out its mission of protecting our state's human and natural resources. The 10 most frequently used job classification series in fiscal 2011, displayed in Figure 2, were:

- Natural Resource Specialist (907)
- Engineering Specialist (300)
- Administrative Assistant (211)
- Engineer (151)
- Program Specialist (150)
- Geoscientist (107)
- Attorney (103)
- Manager (99)
- Accountant (77)
- Systems Analyst (68)

Figure 2.
Population at the TCEQ by Job Classification Series, FY 2011



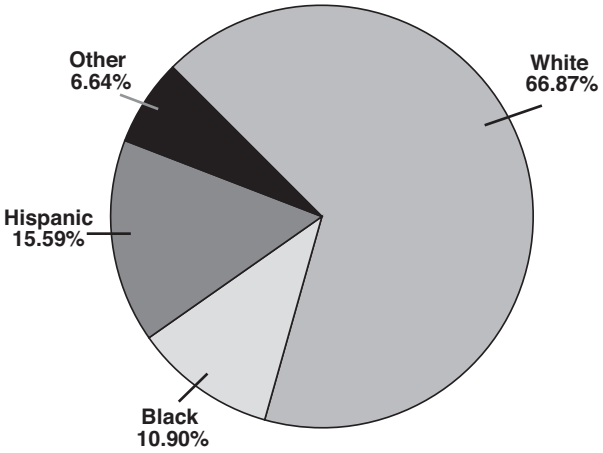
Data Source: Human Resources Information System, as of 8/31/11.

Equal Employment

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

In fiscal 2011, Blacks and Hispanics represented almost 26.5 percent of the agency's workforce, with other ethnic groups constituting over 6.6 percent. See Figure 3 for the ethnicity of the TCEQ workforce in fiscal 2011.

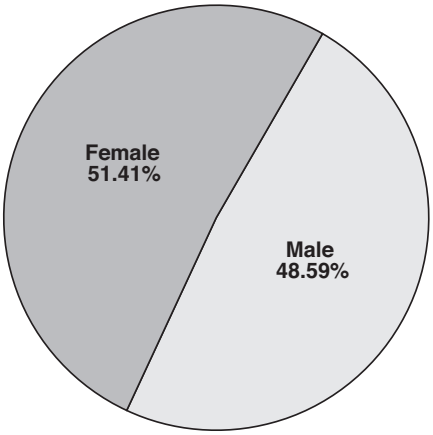
Figure 3.
Ethnicity of TCEQ Workforce, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

In fiscal 2011, the TCEQ workforce was 48.59 percent male and 51.41 percent female. These percentages indicate almost no change from the last reporting period of fiscal 2009 (males, 48.43%; females, 51.57%). Currently, the available State of Texas workforce for males is 54.59 percent; and for females, 45.41 percent. See Figure 4 for the gender of the TCEQ workforce in fiscal 2011.

Figure 4.
Gender of TCEQ Workforce, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

Agency Workforce Compared to Available Statewide Civilian Workforce

Table 3 illustrates the agency's workforce as of Aug. 31, 2011, compared to the available statewide civilian labor force as reported in the January 2011 *Equal Employment Opportunity and Minority Hiring Practices Report,* a publication of the Civil Rights Division of the Texas Workforce Commission. This table provides information by prescribed categories on Blacks, Hispanics, and females within the available statewide labor force (SLF) and the TCEQ workforce. The TCEQ employs staff from four employee job categories.

Although minorities and females are generally well represented at the TCEQ, the agency's ability to mirror the available labor force remains difficult. The TCEQ experienced under-representation in Blacks, Hispanics, and females in almost all job categories during fiscal 2011. The agency will continue to strive to employ a labor force representative of the available Texas workforce.

Recruitment and Retention

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

The TCEQ is fortunate to have one of the lowest turnover rates among state agencies, with a turnover rate of 10.5 percent in fiscal 2011, well below the statewide turnover of 16.8 percent. This low rate can be attributed not only to agency retention efforts but also to the current economic climate.

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

With over 1,000 TCEQ employees (over 38%) becoming eligible to retire by the end of fiscal 2017, the agency faces the possibility of a substantial loss of skill

Table 3. TCEQ Workforce Compared to Available Statewide Labor Force, 8/31/11

EEOC Job Category	Black		Hispanic		Female	
	SLF	TCEQ	SLF	TCEQ	SLF	TCEQ
Official/Administrator	7.5%	6.21%	21.1%	14.71%	37.5%	42.16%
Professional	9.7%	8.58%	18.8%	13.51%	53.3%	44.09%
Technical	13.9%	9.09%	27.1%	13.29%	53.9%	37.06%
Administrative support	12.7%	21.47%	31.9%	23.51%	67.1%	83.99%

Data Source: Human Resources Information System, as of 8/31/11.

and institutional knowledge. This will be particularly critical in management, technical, and program area positions where the loss of the expertise, special skills, and knowledge of experienced staff could significantly affect the delivery of agency programs. Table 4 shows the number of retirements from the agency for fiscal years 2007 through 2011. This is a 19 percent increase from what was reported in the *Strategic Plan: Fiscal Years 2011–2015*.

Table 4.
TCEQ Employee Retirements, FYs 2007–2011

Fiscal Year	Number of Retirees
2007	52
2008	68
2009	55
2010	67
2011	84
Total	**326**

Data Source: Human Resources Information System, as of 8/31/11.

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

On a broad scale, the TCEQ is committed to developing its employees and promoting employee advancement and initiative through career ladders. A career-ladder program was implemented in 1995. To date, career ladders have been established for 21 occupational specialties, with almost 71 percent of non-management employees on career ladders. The establishment of structured career progression reflects the agency's business needs and benefits the employees by providing them defined career advancement opportunities.

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

Training

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

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

Challenges and Opportunities

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

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

Organizational Structure

Recent Changes

When the TCEQ was first established, as the TNRCC (Texas Natural Resource Conservation Commission),

the agency was organized according to the programs it regulates: air, water, and waste.

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

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

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

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

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

Although the TCEQ is a relatively mature agency, having gone through two successful reviews by the Sunset Advisory Commission, it is also a dynamic institution. The agency is open to adjusting its organizational structure in response to changed priorities and identified efficiencies. The current organizational structure is not set in stone and will be modified as needed to improve the agency's ability to fulfill its responsibilities.

Current Organization

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

Commissioners

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

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

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

Bryan W. Shaw, Ph.D., of Elgin, serves as chairman, He was appointed on Nov. 1, 2007, and his term will expire on Aug. 31, 2013. Carlos Rubinstein of Austin was appointed on Aug. 31, 2009. His term will expire on Aug. 31, 2015. Toby Baker of Austin was appointed effective April 16, 2012. His term will expire on Aug. 31, 2017.

Executive Director

The executive director, who is hired by the commissioners, is responsible for managing the agency's day-to-day operations. Major responsibilities include directing the operations of 17 statewide offices, implementing commission policies, making recommendations to

the commissioners about contested permitting and enforcement matters, and approving uncontested permit applications and registrations.

The deputy executive director serves as the chief operating officer to assist the executive director in the administration of the agency. Four divisions report directly to the executive director:

- Agency Communications
- Intergovernmental Relations
- Small Business and Environmental Assistance
- Toxicology

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

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

Office of Administrative Services

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

- Budget and financial administration.
- Human-resources management and staff development.
- Information technology.
- Records management.
- Management and support of assets, physical property, and the Procurement and Contracting and Historically Underutilized Business programs.

Office of Air

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

- Air Permits
- Air Quality

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

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

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

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

Office of Compliance and Enforcement

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

Office of Legal Services

The Office of Legal Services manages legal services for the agency in environmental law, enforcement litigation, bankruptcy, and general agency operations. The office gives legal counsel and support to the executive director, the agency programs, and–along with the general counsel and the public interest counsel–the commissioners. The office ensures that commission decisions follow the law, and that rules we develop comply with statutory authority and are applied consistently.

Office of Waste

The Office of Waste oversees programs aimed at protecting our state's human and natural resources by ensuring the safe management of waste; protecting the public and the environment from unnecessary radiation exposure and contamination; ensuring the competency of individuals licensed by the TCEQ; and remediating pollution or contaminants from media such as soil, groundwater, sediment, and surface water. The Office of Waste carries out these responsibilities through the implementation of state and federal environmental laws and regulations. Major programs of the Office of Waste include:

- Industrial and Hazardous Waste (IHW) Permitting
- IHW Corrective Action
- Municipal Solid Waste (MSW) Permitting
- Underground Injection Control (UIC)
- Radioactive Materials Licensing
- Superfund
- Voluntary Cleanup Program (VCP)
- Innocent Owner/Operator Program
- Brownfields Program
- Dry Cleaner Remediation
- Petroleum Storage Tank (PST) Remediation
- Occupational Licensing for Environmental Occupations
- Registration Programs for Dry Cleaners; PST; IHW; Sludge and Used Oil
- Natural Resource Trustee Program

Office of Water

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

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

C H A P T E R 2

Geographic Aspects

Location of the Agency

The Texas Commission on Environmental Quality, headquartered in Austin, Texas, provides a diverse array of environmental regulatory services to protect public health and the environment through its 16 regional offices located throughout the state.

Agency Headquarters

The TCEQ central office complex in Austin (12100 Park 35 Circle) includes five state-owned buildings and one leased building on approximately 30 acres of land. The Austin regional office is now also located in one of these buildings. There are approximately 377,107 square feet of office and laboratory space in the five state-owned buildings. The sixth building, a leased facility, is 167,074 square feet. Located elsewhere in Austin are a leased warehouse of 10,964 square feet and an emissions testing facility of 2,000 square feet. The total space for the headquarters complex is 557,147 square feet. There are parking facilities for 2,095 vehicles.

The Texas Facilities Commission (TFC) is responsible for the management and maintenance of the five state-owned buildings and the parking lots at the TCEQ's agency headquarters. Management and maintenance of the leased building is the responsibility of the lessor.

Regional Offices

The TCEQ maintains 16 regional offices at the following locations:

1. Amarillo ~ 3918 Canyon Dr., Amarillo, TX 79109-4933
2. Lubbock ~ 5012 50th St., Ste. 100, Lubbock, TX 79414-3426
3. Abilene ~ 1977 Industrial Blvd., Abilene, TX 79602-7833
4. Dallas–Fort Worth ~ 2309 Gravel Dr., Fort Worth TX 76118-6951
5. Tyler ~ 2916 Teague Dr., Tyler, TX 75701-3734
6. El Paso ~ 401 E. Franklin Ave., Ste. 560, El Paso, TX 79901-1212
7. Midland ~ 9900 W IH-20, Ste. 100, Midland, TX 79706
8. San Angelo ~ 622 S. Oakes, Ste. K, San Angelo, TX 76903-7035
9. Waco ~ 6801 Sanger Ave., Ste. 2500, Waco, TX 76710-7826
10. Beaumont ~ 3870 Eastex Fwy., Beaumont, TX 77703-1830
11. Austin ~ 12100 Park 35 Circle, Bldg. A, Rm. 179, Austin, TX 78753-1808
12. Houston ~ 5425 Polk St., Ste. H, Houston, TX 77023-1452
13. San Antonio ~ 14250 Judson Rd., San Antonio, TX 78233-4480
14. Corpus Christi ~ 6300 Ocean Dr., Ste. 1200, Unit 5839, Corpus Christi, TX 78412-5839
15. Harlingen ~ 1804 W. Jefferson Ave., Harlingen, TX 78550-5247
16. Laredo ~ 707 E. Calton Rd., Ste. 304, Laredo, TX 78041-3887

The total space occupied by the regional offices is 232,992 square feet. This includes the Galveston Bay Estuary Program office in Webster, a laboratory facility in Houston, a satellite office in Stephenville, and a small office space in Eagle Pass.

Security

TFC is responsible for security for the state-owned buildings at Park 35 and for the leased building during normal business hours. After-hours, holiday, and weekend security for the leased building is the responsibility of the lessor. Security for the regional offices is the responsibility of the lessor, and TCEQ staff coordinates necessary improvements to enhance security.

Accessibility

The TCEQ remains accessible to Texas citizens with the 16 regional offices geographically dispersed

throughout the state. The Park 35 complex and regional offices comply with the Americans with Disabilities Act (ADA).

Affected Populations

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

Special Regions Served

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

Texas and Louisiana Border Area

The Caddo Lake watershed is a rich and unique ecosystem that straddles the Texas-Louisiana border. The ecosystem is threatened by invasive aquatic vegetation and impacts related to water quality and hydrology.

In 2009, 2010, and 2011 the Texas Legislature provided $120,000 in funding per year to aid in the fight against the aquatic plant giant salvinia in Caddo Lake. The Cypress Valley Navigation District (CVND) was also provided grants to support its efforts to control invasive aquatic vegetation, such as giant salvinia and water hyacinth, in Caddo Lake.

The Region D Water Planning Group of the Texas Water Plan has provided recommendations to control giant salvinia. These recommendations include dedicating available state funds to the task, using additional government resources when available, and developing legislation that will assist local and state officials in their efforts to eliminate or control the spread of existing infestations of the plant.

Caddo Lake Watershed Protection Plan

With the goal of developing a watershed plan designed to restore and protect water quality and improve aquatic habitat, the Caddo Lake Watershed Steering Committee, in close cooperation with the TCEQ, initiated a watershed planning project funded by the TCEQ NPS (Nonpoint Source) grant program. The project was successful in raising awareness of stakeholders about water quality issues, characterizing conditions in the watershed, and preliminarily identifying pollution sources. Stakeholders in the watershed will review the results of this project to identify priority areas for further investigation needed to enhance the watershed analyses.

Water Quality Standards for Caddo Lake, Toledo Bend Reservoir

On June 30, 2010, the TCEQ adopted new numerical criteria for nutrients for 75 reservoirs in Texas, in order to protect these water supply sources from excessive growth of aquatic vegetation. These criteria are currently being reviewed by the Environmental Protection Agency (EPA). Similar criteria for Caddo Lake and Toledo Bend Reservoir are also needed, and the staff of the TCEQ and the Louisiana Department of Environmental Quality (LDEQ) are coordinating to develop joint criteria that are compatible with the water quality management programs of both states.

Water Quality Monitoring

Both the LDEQ and the TCEQ coordinate water quality monitoring along the Sabine River and in Caddo Lake and Toledo Bend Reservoir. The TCEQ regional office operates a continuous monitoring station on Big Cypress Bayou, just upstream of Caddo Lake.

Red River Nutrient Criteria Project

Texas participated in a joint study with several states to develop numerical nutrient criteria that could be used to assess and control excessive growth of aquatic vegetation in the Red River. As a downstream state on the Red River, Louisiana was a participant

in this study, as were New Mexico, Arkansas, and Oklahoma. Under an EPA grant that was coordinated by the University of Arkansas, data from the participating states were consolidated in order to (1) assess existing nutrient conditions along the river and (2) evaluate nutrient criteria for possible addition to the individual states' water quality standards. The participating states are currently reviewing reports and analyses from the recently completed study. The study results are based on shared data from participating state monitoring programs.

Sabine River Compact

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

Texas experienced severe drought conditions in 2011. As part of the technical support for the Sabine River Compact, the TCEQ closely monitored flow at the Beckville gage. When flow in the Sabine River was low, the TCEQ, in coordination with the Sabine River Compact Commissioners, took steps to ensure compliance with the Sabine River Compact.

The TCEQ notified water-right holders and reservoir owners that suspensions or releases of water could become necessary to ensure compliance with the Sabine River Compact. Fortunately, all those actions were not necessary. The TCEQ did suspend temporary water-use permits in the Sabine River watershed above the Beckville gage and did not issue new temporary permits. The TCEQ also conducted flyovers to look for diversions of water, and deployed field staff to verify diversions and actual stream flows.

Texas and Mexico Border Area

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

Since December 2008, the TCEQ has implemented a Border Initiative, a comprehensive, cooperative effort to serve border residents. The TCEQ captures the Border Initiative in a document that is updated regularly, which lists TCEQ programs and accomplishments in the border region. The *Border Initiative* publication can be found on the TCEQ's website at <www.tceq.state.tx.us/goto/border>. As part of the Border Initiative, in May 2011 Commissioner Garcia signed a memorandum of cooperation for the TCEQ with Secretary Homero Támez for the Secretariat of Environment and Urban Development (SEDUMA) in Tamaulipas. The signing was witnessed by Chairman Shaw and Commissioner Rubinstein.

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

Economic and Social Issues

The border region economy is diverse, with agriculture and ranching, oil and gas production, trade and commerce, industry (particularly maquiladoras, Mexican assembly plants), and tourism playing key parts. The annual influx of "Winter Texans"–residents

of Midwestern and Northern U.S. states who move to the Lower Rio Grande Valley and other parts of the region for the winter months–also plays a significant role in the economy.

The 2010 population of the 32 counties in the Texas border region, stretching from El Paso to Brownsville, was more than 2.6 million. While the region contains some of the fastest-growing metropolitan areas in the United States–the population-growth rate of the Texas border region is twice that of Texas as a whole–poverty in some border communities is also among the highest in the nation.

Rapid industrial growth and population increases on the Mexican side of the border also affect Texas' border environment. Much of this growth is due to economic factors that encourage many Mexicans to migrate to border cities in search of jobs. As of 2011, there were 1,892 maquiladoras in the four Mexican states bordering Texas, directly employing or subcontracting 813,000 people. Many Mexican workers are attracted to the border because of maquiladoras, the overall better economy of the border states, and the proximity to the United States.

Infrastructure

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

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

Water Resources

Background

As the current drought in Texas has shown, water availability is critical throughout the state. It is especially so in the border region of Texas and its neighboring Mexican states, where annual rainfall varies between seven inches in El Paso–Ciudad Juárez and 25 inches in Brownsville-Matamoros.

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

Surface Water

The Rio Grande is the principal river in the region, with major tributaries in both the United States and Mexico. It begins in the San Juan Mountains of southern Colorado and ends 2,000 miles later, at the Gulf of Mexico. Another mountain source in Mexico's Sierra Madre range forms the Río Conchos tributary, which historically provided more than three-quarters of the flow to the "Big Bend" of the Rio Grande and beyond. For 1,254 miles after entering Texas from New Mexico, the Rio Grande is the international boundary between the two nations. It drains a land area more than twice the size of California, including parts of three U.S. and five Mexican states and 19 tribal and pueblo lands.

Two international agreements (1906 and 1944) apportioned the waters of the Rio Grande between Mexico and the United States, with the latter agreement creating the International Boundary and Water Commission (IBWC) to verify water distribution between the two nations. The TCEQ's Rio Grande

Watermaster allocates U.S. waters to Texas water-right holders from Ft. Quitman in Hudspeth County to the Gulf of Mexico; upstream of Ft. Quitman, the Rio Grande Compact Commission ensures water deliveries to Texas for the El Paso area.

Elephant Butte Reservoir in New Mexico provides water for New Mexico users and for Texas users in El Paso and Hudspeth counties, as well as Mexico's allotted water under the 1906 agreement, normally 60,000 acre-feet a year. Most of this water is diverted, resulting in very little flow below Ft. Quitman, creating a "Forgotten River" stretch between El Paso and Presidio. In August 2011, New Mexico filed litigation in federal district court against the Bureau of Reclamation. This litigation is an effort by New Mexico to reduce water deliveries to Texas users from Elephant Butte Reservoir. The Texas Rio Grande Compact Commissioner is taking steps to ensure that this does not happen.

Groundwater

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

Challenges

Surface Water

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

As previously stated, the main source of water for the two reservoirs is Mexico's Río Conchos, the largest Rio Grande tributary. Beginning in the State of Durango, it drains much of Chihuahua before entering the Rio Grande at Ojinaga and Presidio, Texas. Under the 1944 Water Treaty, one-third of the water of the Conchos and five other Mexican tributaries belongs to the United States and shall "not be less, as an average amount in cycles of five consecutive years, than 350,000 acre-feet annually." The current cycle started Oct. 25, 2010, after U.S. capacity in both reservoirs was 100 percent due to hurricanes and tropical storms that helped fill both reservoirs; however, as of Feb. 18, 2012, combined U.S. storage capacity in Amistad and Falcon reservoirs had decreased to 62.5 percent.

Starting with the five-year cycle that ended in 1997, Mexico incurred a 1.5 million acre-feet Rio Grande water debt for not providing water to the United States under the terms of the 1944 treaty. The water debt created bilateral problems for many years, reaching the highest levels of government in the two nations before eventually being resolved in 2005. The absence of a definition of the term "extraordinary drought" in the treaty added to the difficulties. Subsequent to the resolution of the "water debt," extreme flooding occurred in 2008 within the Rio Conchos basin, filling all Mexican reservoirs as well as Falcon and Amistad. For the five-year cycle that began Oct. 25, 2010, as of Feb. 18, 2012, Mexico is already behind on its water deliveries by more than 160,000 acre-feet.

Groundwater

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

Actions and Accomplishments

Surface Water

In October 2007, Mexico transferred Rio Grande reservoir water to the United States, ensuring the closure of a treaty cycle without a deficit for the first time in fifteen years; water levels in the combined Amistad-Falcon reservoir system were at their highest in more than a decade.

In addition, in September 2007, the 10 U.S.–Mexico governors agreed to define the term "extraordinary drought" for the Rio Grande basin as it was used in the 1944 Water Treaty, to facilitate the interpretation of treaty compliance in subsequent five-year accounting cycles. In September 2009, the TCEQ presented a draft definition of "extraordinary drought" at the XXVII Border Governors Conference in Monterrey, Nuevo León.

The TCEQ remains vigilant to ensure that Texas obtains its water under the 1944 treaty. The TCEQ continues to hold meetings with the U.S. and Mexico sections of the IBWC to ensure that water deliveries from Mexico improve and to guard the interests of Texas water-rights holders.

Groundwater

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

Waste Management

Background

International Waste Issues

Maquiladora waste currently does not present a problem for Texas capacity, but the TCEQ continues to track this issue. Mexican law requires that waste generated by maquiladoras be returned to the country of origin, and under the La Paz Agreement the United States must accept it. The volume of municipal solid waste (MSW) shipped from Mexico to Texas has varied widely in recent years, decreasing from 48,000 tons in fiscal 2004 to 4,200 tons in 2006, and then increasing somewhat to slightly more than 10,000 tons in each of fiscal years 2007 and 2008. Data show that in calendar year 2010, 715 tons of hazardous waste and 336 tons of Class 1 nonhazardous waste (1,051 total tons) were shipped from Mexico to eight different facilities in Texas, which represents a significant decrease from previous years.

There have been concerns expressed in years past about whether there was a disproportionately high number of facilities treating, storing, or disposing of hazardous and nonhazardous waste in the border region, compared to the rest of state. Currently, there are no facilities treating hazardous waste in the border and 33 MSW landfills in the 32 counties included in the border region.

Domestic Waste Issues

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

Challenges

Border MSW Disposal

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

Actions and Accomplishments

International Waste Issues

Maquiladora waste currently does not present a problem for Texas capacity, but the TCEQ continues to track this issue. The EPA and its Mexican counterpart, SEMARNAT, exchange reports every six months on border hazardous waste disposal facilities, with the TCEQ providing input for these "Consultative Mechanism" reports. Unfortunately, SEMARNAT has only provided two of the required reports in the last five years while the EPA has provided all 10, so the two parties are in discussions over continuing the reporting procedure.

MSW Disposal

Solid waste planners use "years of capacity remaining" as a benchmark for municipal solid waste landfills. The most recent annual report on municipal solid waste in Texas establishes the statewide average of 60 years of capacity remaining (as of Aug. 31, 2010). However, the same report lists four of the five border-region COGs as below the average, at 12, 24, 25, and 44 years of capacity remaining. The COG with only 12 years of average capacity in its area is the South Texas Development Council, comprising Webb, Zapata, Jim Hogg, and Starr counties. The capacity in the South Texas Development Council will increase as a result of a landfill expansion in Zapata County that was approved in 2009, and a new landfill in Webb County that was permitted in 2009. In addition, a new transfer station in Starr County began shipping municipal solid waste to a landfill in Hidalgo County in 2010.

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

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

The Texas disposal rate dropped from 7.1 pounds per person per day in 2009 to 6.2 pounds in 2010. The decrease may be attributed to the public's efforts to minimize waste, waste reduction and recycling campaigns, and ongoing public education efforts. Recycling can reduce waste going to landfills. In the border region, the County of Zapata and the cities of El Paso, Alpine, Eagle Pass, Laredo, Alton, Edinburg, McAllen, Pharr, and San Benito all maintain recycling programs. In January 2012 Brownsville celebrated the first anniversary of its ban on plastic bags.

Air Quality

Background

Under the federal Clean Air Act, the EPA established standards for six criteria pollutants based on potential effects of ambient concentration levels of pollutants on public health. The EPA may designate a geographical area not in compliance with one of these standards as "nonattainment." In the Texas border region, air quality attainment issues have been experienced mainly in El Paso.

Challenges

Throughout the 1990s and the early part of the first decade of the 2000s, El Paso was in nonattainment for three criteria pollutants: ozone, carbon monoxide, and particulate matter. El Paso shares its airshed with Ciudad Juárez, in Chihuahua, and parts of New Mexico. This means that air pollution generated in any one of these jurisdictions can affect the others, and cooperation is necessary in order to improve air quality. Cross-border collaboration and TCEQ activities have indeed resulted in improvements (see below), and the city is now in attainment for ozone, carbon monoxide, and $PM_{2.5}$, with just PM_{10} remaining in nonattainment.

For a brief period, there were concerns about the EPA standards being lowered, which might put El Paso in nonattainment for ozone. However, on Sept. 22, 2011, the EPA decided to retain the 2008 ozone standard of 0.075 parts per million: it will not be proceeding with the 2011 ozone standard at this time. The

2010 design value for El Paso is 0.071 parts per million and below the ozone standard for 2008 through 2010. The TCEQ will continue to work with local organizations in El Paso to maintain the monitored ozone values below the 2008 standard. The next ozone standard review is scheduled to be final in 2014.

Actions and Accomplishments

The need to work with partners in Mexico and New Mexico was addressed through the creation in 1996 of the binational Joint Air Quality Advisory Committee for the Improvement of Air Quality in the El Paso–Ciudad Juárez–Doña Ana County Air Basin. The JAC, as it is known, is structured to include members from both federal governments, the two U.S. states and Chihuahua, and the three local governments, plus representatives of the private, academic, and nonprofit sectors.

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

Natural Resources

Background

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

Challenges

An issue in the region is visibility degradation caused by haze in Big Bend and Guadalupe Mountains national parks. Panoramic views are considered critical for national parks. The haze is created by multiple sources of pollution, both within and outside of Texas. Under the federal Clean Air Act, the EPA established rules for dealing with haze; however, the EPA recognizes that these complex circumstances mean that many years will be required to show the "reasonable progress" called for by the regulations.

Actions and Accomplishments

The TCEQ is working with the EPA, the National Park Service, and other U.S. states in a designated region to address this challenge. In February 2009 the commission adopted revisions to the Texas State Implementation Plan (SIP) for visibility protection in the two affected national parks and is awaiting EPA approval.

Border 2012: Binational Border Environmental Program

In April 2003, the U.S. and Mexican federal and border state agencies and U.S. border tribes jointly developed Border 2012, a binational program with a bottom-up collaborative approach. Border 2012 has allowed border residents to develop local environmental priorities by participating in Regional Work Groups (RWGs) along the U.S.–Mexico border. Two of the four RWGs include parts of Texas: the Texas–New Mexico–Chihuahua RWG and the Texas–Coahuila–Nuevo León–Tamaulipas (Four-State) RWG.

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

The Border Environment Cooperation Commission and the North American Development Bank, created under a U.S.–Mexico environmental side agreement to the NAFTA, provide critical resources in addressing the water-related objectives of Border 2012. They have assisted in the design of drinking-water and wastewater infrastructure for border-area communities in Texas and Mexico, as well as provided financial assistance for its construction. In Texas, programs initiated in 1989 have continued to provide funding for similar infrastructure in colonias. As a result of all these efforts, water quality in the Rio Grande has improved.

Other accomplishments of local governments during the Border 2012 program have included an increase of local recycling programs, greater collection of household hazardous wastes and used electronic products, and updates developed for cross-border (sister-city) emergency response plans.

The TCEQ has worked with other program partners in developing Border 2020, the successor program to Border 2012. The TCEQ will continue to play a very active role in this binational program.

Other Water-Related Infrastructure

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

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

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

C H A P T E R 3

Organizational Aspects

Capital Assets and Improvements

One of the most significant capital assets maintained by the agency–vital in a state as large as Texas–is vehicles.

Vehicles

The TCEQ currently maintains a fleet of 391 vehicles–312 vehicles (80%) are in the field and 79 vehicles (20%) are in Austin. TCEQ field vehicles are used in the performance of core missions of the agency, as mandated by the Texas Legislature and the U.S. Environmental Protection Agency.

It is the policy of the agency to purchase factory equipped alternative fuel vehicles (AFV) and hybrid vehicles whenever possible. There are 53 vehicles in the fleet that have been converted to use liquid petroleum gas (LPG). These and other vehicles will eventually be replaced by gasoline-electric hybrids or those equipped to use gasoline/ethanol or E85 fuel. By the end of fiscal 2011, there were approximately 53 hybrids and 139 E85 vehicles in use by the agency.

Regional employees use vehicles in the following ways:

- **Mission critical for inspections**–includes investigations and regulation of sources of pollution throughout the state, and to respond to pollution complaints.
- **Special use**–involves vehicles in the Surface Water Quality Monitoring Program that are necessary to transport boats and other equipment as well as the transportation of generators and air-monitoring equipment to conduct air samplings throughout the state.
- **Emergency response**–includes carrying specialized tools and monitoring equipment that are required to be available 24 hours a day, 7 days a week.

The TCEQ has established a vehicle replacement schedule for vehicles in field service to maximize the efficient use of vehicles. This schedule requires vehicles in the field to be replaced if any of the following criteria apply: mileage over 100,000, age is over 6 years, unsafe to operate, or deemed uneconomical to repair and operate. As a result, the TCEQ Fleet Management section typically needs to replace 39 to 45 vehicles per year.

In general, most vehicles should be replaced when they reach 6 years (72 months) of service or 100,000 miles, whichever comes first. However, there are circumstances in which vehicles are replaced sooner (such as excessive maintenance or repair costs), or later (such as budget limitations).

Table 5 details the specific replacement goals for different types of vehicles and vehicle uses.

If an agency vehicle meets the criteria in Table 5, the vehicle may be taken out of service and surplused, or transferred to the central office in Austin for continued local or campus-wide use. The surplus vehicles (except stolen or totaled vehicles) are then sold through the Texas Facilities Commission. All the funds generated from vehicle sales are returned to the agency to help purchase replacement vehicles.

Facility Improvements

Any decision, expenditures, or budget requests for capital improvements are managed through the Texas Facilities Commission.

Table 5. Vehicle Replacement Goals

Vehicle Type	Purpose	Replacement Goals
Sedans and wagons	Staff or authorized passenger transport	6 years or 100,000 miles
Light trucks	Basic transport, light hauling	6 years or 100,000 miles
Passenger vans, SUVs	Staff or authorized passenger transport	6 years or 100,000 miles
Cargo vans	Cargo hauling	8 years or 100,000 miles

Historically Underutilized Businesses (HUBs)

Mission Statement

The Historically Underutilized Business (HUB) program of the TCEQ encourages the use of HUBs in procurements and contracts for commodities and services by promoting full and equal business opportunities for all businesses in Texas.

Program Overview

The TCEQ administers the state-mandated HUB program, which promotes full and equal utilization of minority- and women-owned businesses in the procurement of goods and services.

The TCEQ's HUB Policy

In accordance with HUB legislation, the TCEQ adopted Title 34, Texas Administrative Code, Subchapter 20B (34 TAC 20B), including the recent updates to 34 TAC 20, effective Sept. 14, 2011, as its own. Additional guidance is provided in the TCEQ's Operating Policies and Procedures and Guide to Administrative Procedures (GAP) Manual.

HUB Defined

A HUB is defined by the Texas Government Code, Chap. 2161, and 34 TAC 20.10–12 as a business (such as a corporation, sole proprietorship, partnership, joint venture, or a supplier who contracts between a HUB and a prime contractor or vendor) formed for the purpose of making a profit that meets all of the following criteria:

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

HUB Program Staff

The TCEQ's HUB program office is located in the Financial Administration Division of the Office of Administrative Services at the agency's central campus, in Austin. The HUB program employs two FTEs: a HUB coordinator and a HUB reporting specialist. The HUB coordinator is responsible for coordinating all functions and activities related to the implementation of rules and regulations governing the HUB program. The HUB reporting specialist assists in HUB reporting activities to TCEQ management, as well as to the Texas Comptroller of Public Accounts and the Legislative Budget Board.

Goals, Objectives, and Strategies

The TCEQ is fully committed to increasing HUB participation in accordance with the goals specified in the 2009 State of Texas Disparity Study. The HUB program's fundamental objective is to assure that qualified minority- and women-owned businesses are well represented in agency procurement and contracting. The TCEQ will continue to enhance HUB participation through outreach and other measures, proactively working with staff across the agency to maximize HUB procurement and contracting opportunities.

The agency will also continue working externally to identify, educate, and assist HUB vendors, contractors, and subcontractors.

The TCEQ's strives to meet or exceed the statewide Annual Aspirational Procurement Utilization Goals and the agency-specific HUB utilization goals. The procurement goals are based on the agency's total expenditures and the percentage of purchases and subcontracts awarded directly and indirectly to HUBs within specific procurement categories. The agency's HUB performance goals and the previous two years' performance are shown in Table 6.

Following are new and ongoing goals, objectives, and strategies representative of the TCEQ's good-faith effort to realize its procurement goals.

HUB Vendors

Goal 1. Increase the utilization of HUB-certified vendors.

Objective 1.1. Encourage HUB participation through internal and external outreach.

Strategy 1.1.A. Conduct educational programs on the agency's procurement processes and assist minority- and women-owned businesses in acquiring HUB certification.

Strategy 1.1.B. Divide requisitions and assess how bonding and insurance requirements would best further HUB opportunities.

Strategy 1.1.C. Facilitate Mentor-Protégé agreements to foster long-term relationships between contractors and HUBs.

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

Purchasers and Key Decision Makers

Goal 2. Increase use of HUBs on the part of purchasers and key decision makers.

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

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

Policies and Procedures

Goal 3. Establish HUB-related procurement and contracting policies and practices that effectively maximize HUB utilization.

Objective 3.1. Ensure that ongoing good-faith efforts encourage inclusion of HUBs in all purchasing and procurement opportunities as applicable and as set forth by the Texas Administrative Code and adopted by the TCEQ.

Strategy 3.1.A. Review existing policies and procedures and amend as necessary in consultation with work groups.

Strategy 3.1.B. Evaluate and maximize, as feasible, each division's HUB participation performance.

Financial Status and Outlook

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

Table 6. Statewide HUB Goals and TCEQ Performance*

Category	Goals for FYs 2010–2011	Performance		Goals for FYs 2012–2017
		2010	2011	
Commodity Contracts	12.6%	30.23%	49.63%	21.0%
Other Services Contracts	33.0%	39.38%	35.62%	24.6%
Professional Services Contracts	20.0%	28.22%	9.47%	23.6%

*The TCEQ is currently developing agency-specific HUB goals for adoption.

correlating legislative budget reductions, the TCEQ appropriations for 2012–13 were $274 million (28% less than 2010–11 appropriations). The TCEQ absorbed most of the reductions in two large grant programs–the Low Income Repair Assistance and Accelerated Vehicle Retirement Program (LIRAP) and the Texas Emissions Reduction Program (TERP)–which accounted for $191 million of the total agency reductions. The full-time-employee equivalent cap was also reduced by 240 (8%) from the previous biennium. This reduction was managed by reallocating staff to core programs. If appropriations are reduced in future biennia, the TCEQ would be required to cut core operations and the agency would find it increasingly difficult to meet its mission and goals.

Funding Sources and Uses

The TCEQ is funded primarily by fee revenues. The agency was appropriated $692 million for the 2012–13 biennium, of which $583 million (84.3%) was derived from dedicated fee revenues. The remainder of the agency's appropriations consists of $78.6 million in federal funds, $11.8 million from General Revenue, and $18.1 million in interagency contracts and appropriated receipts.

The appropriations from dedicated fee revenues for the 2012–13 biennium consist of $130 million (18.8%) from the Texas Emissions Reduction Plan fund, $111 million (16.1%) from the Water Resources Management Account, $101 million (14.6%) from the Clean Air Account, $62 million (9%) from the Operating Permit Account, $56.3 million (8.1%) from the Waste Management Account, $48 million (6.9%) from the Hazardous and Solid Waste Remediation Account, $44 million (6.4%) from the Petroleum Storage Tank Remediation Account, and the remaining $30.2 million (4.4%) from other dedicated fee funds.

While the TCEQ is primarily a fee-funded agency, many of the fees and funds have use restrictions that limit the ability of the TCEQ and the Legislature to allocate funds to meet challenging environmental needs. However, some flexibility is provided by Rider 14 in the TCEQ's General Appropriations Act, which allows for the reallocation of 7 percent of funds for other uses.

Funding Issues

In the next few years, the TCEQ is facing a number of unique financial challenges that have been created by both the economic condition of the state and the agency's own success at implementing programs.

The Low-Level Radioactive Waste Disposal Account (088) provides funding to oversee the low-level radioactive waste disposal facility operations located in Andrews County. The funding levels in the account are expected to increase in the coming biennium. The State of Vermont is required to pay a $12.5 million balance as compensation for Texas to serve as the host state for the disposal facility, pursuant to the Texas Low-Level Radioactive Waste Disposal Compact.

During the 82nd Legislative Session, SB 1504 authorized the facility to accept non-party (out-of-state) waste. The bill allocated 30 percent of the facility's available disposal area to be used for out-of-state waste and required that all non-party waste accepted at the facility pay a 20 percent surcharge in addition to the compact disposal rates. The remaining Vermont compact money, along with the application and compact fees and the new non-party surcharge, will allow the fund balance to grow over the next few years. The additional revenue will increase interest generated in the account balance from $100,000 annually in fiscal 2011 to potentially over $500,000 by the end of fiscal 2015.

The Clean Air Account (0151) was facing a declining fund balance because the Low-Income Repair Assistance and Accelerated Vehicle Retirement Program (LIRAP) had been appropriated amounts in excess of revenue collected for the program. The appropriations resulted in a decrease in the available fund balance of approximately $20 million annually. The 82nd Legislature reduced appropriations for the LIRAP program, which stabilized the fund balance. The balance is anticipated to grow from $25 million at the end of 2011 to over $100 million by the end of 2013.

The Water Resource Management Account (0153) is facing a significant funding need in the

coming years to manage the ongoing drought in Texas along with other water-related programs. The Legislature increased appropriations by $5.6 million in 2012–13 out of the Water Resource Management Account, which was the only TCEQ account that had appropriations increased during the 82nd Legislative Session. The drought will continue to require additional spending by the TCEQ on water programs throughout the state and will require the TCEQ to increase revenue to ensure that cash is available to support the appropriations.

In 2012 the agency implemented a new fee, the Pesticide General Permit fee. The fee is required when spraying any herbicides or pesticides on or near waters in Texas. The permit is part of a new EPA program monitoring the discharge of pest-related chemicals near surface water.

The rate change application fee, the certification of public necessity and convenience (CCN) application fee, and the transfer of CCN fee were eliminated in 2012 as part of the Sunset Advisory Commission review. The elimination of these fees will decrease revenue collections by $27,000 in FY 2012.

The Petroleum Storage Tank Program has undergone a significant change due to Sunset Advisory Commission recommendations implemented during the 82nd Legislative Session. Fees used to support the program were continued and the fee-rate authority was transferred from statutory authority to agency rule. The 82nd Legislature reduced the PST appropriations by over $8.3 million for the biennium, which will reduce the number of cleanup projects. The TCEQ has begun the process of setting new rates by rule that will be 27 percent lower than the currently authorized fees. The new fee rates will be in effect statewide on July 1, 2012. As a result of the fee reduction, the fiscal 2013 fund balance is expected to be approximately $143 million. This amount is expected to be sufficient to support the program's cost and gradually build fund balance under the current appropriation guidelines.

The Texas Emissions Reduction Plan (TERP) Program (Account 5071), the agency's largest revenue generator, has started to rebound as result of the economic recovery. In 2011, revenue returned to pre-recession levels and is expected to exceed the Biennial Revenue Estimate (BRE) in fiscal years 2012 and 2013. The account's fund balance is growing and is projected to exceed $500 million by the end of fiscal 2013. The growth of the fund balance is a result of both the economic recovery and reduction in appropriations by the 82nd Legislature.

The Operating Permit Account (5094) in 2011 was facing a unique funding challenge, because it was a victim of its own success. Program costs remained stable, while the air emissions in Texas have been steadily on the decline. One of the major reasons for cleaner air is that Title V permit holders have managed to reduce emissions by approximately 5 percent annually. This reduction has led to lower revenue collections for the program. The fee rate is based not only on each permit holder reducing emissions annually, but also on the Consumer Price Index (CPI), which is used to offset the impact of emission reductions on revenue collections. However, lower-than-expected CPI rates have led to a decline in revenue collections and a dependence on fund balance, which has been declining over the past few years. This required the TCEQ to adopt new rate structures through a rule proposal on July 20, 2011, to be implemented in fiscal 2012. Under the adopted rate structure, the agency has the flexibility to increase or decrease the fee rate to cover program costs and appropriations regardless of CPI adjustments or a reduction in emissions.

The agency has several sources of revenue that are directly affected by economic conditions, and deteriorating economic conditions have led to reductions in fee collections for a number of programs. The Waste Management Account (0549) and the Hazardous Waste Remediation Account (0550) have been utilizing fund balance to cover appropriations for the past few years. Fees, such as the tipping fee, which are heavily affected by home construction, have not been collected at the level projected. The accounts have sufficient fund balance to maintain appropriations for a few years, but if the reduction in revenue collections

continues, the agency will need to address shortages with a fee-rate adjustment.

The agency has some accounts that are performing above expectations. The Used Oil Recycling Account (0146), the Occupational Licensing Account (0468), the Solid Waste Disposal Account (5000), and the Environmental Testing Lab Accreditation Account (5065) are bringing in revenues above BRE estimates and appropriated totals. This has helped build fund balances in these accounts. Revenue collected in the Watermaster Administration Account (0158) has been consistently above the BRE, which has allowed the program to request additional appropriation authority during the past few years.

As the TCEQ continues to achieve its major goals, such as the reduction of air emissions and waste generation, the amount of revenue it collects to fund agency operations consequently declines. The agency is in the process of identifying more stable and flexible funding sources to support its ongoing operations.

Economic and Population Forecast

Table 7 represents the population and economic forecast for Texas through fiscal 2015.

Table 7. Economic and Population Forecast for Texas and the U.S., FYs 2010–2017, Winter 2011 Forecast

CATEGORY	2010	2011	2012*	2013*	2014*	2015*	2016*	2017*
TEXAS								
Gross State Product, 2005 dollars (billions)	1,103	1,127	1,150	1,178	1,219	1,266	1,309	1,351
Annual Change (%)	3.7	2.2	2	2.4	3.5	3.9	3.4	3.2
Gross State Product, current dollars (billions)	1,186	1,254	1,300	1,353	1,432	1,522	1,610	1,697
Annual Change (%)	2.2	5.7	3.7	4.1	5.8	6.3	5.8	5.4
Personal Income (current dollars, billions)	980	1,036	1,080	1,120	1,176	1,244	1,311	1,382
Annual Change (%)	2	5.7	4.3	3.7	5	5.7	5.5	5.4
Nonfarm Employment (thousands)	10,291	10,520	10,671	10,834	11,050	11,314	11,569	11,805
Annual Change (%)	-1.1	2.2	1.4	1.5	2	2.4	2.3	2
Resident Population (thousands)	25,204	25,673	26,142	26,599	27,044	27,497	27,961	28,429
Annual Change (%)	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.7
Unemployment Rate (%)	8.2	8.3	8.3	8.1	7.5	6.8	6.4	6
UNITED STATES								
Gross Domestic Product (2005 dollars, billions)	12,987	13,256	13,474	13,753	14,159	14,649	15,100	15,511
Annual Change (%)	2.1	2.1	1.6	2.1	2.9	3.5	3.1	2.7
Consumer Price Index (1982–84 = 100)	217	223	227	231	236	241	246	251
Annual Change (%)	1.4	2.8	1.8	1.8	2.2	2.1	2.1	2
Prime Interest Rate (%)	3.3	3.3	3.3	3.3	3.8	5.8	7	7

*Projected. *Sources:* Texas Comptroller of Public Accounts; Texas State Data Center.

Technological Developments

Information Strategic Plan

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

- *Improve Internal and External Access to Information.* The TCEQ is planning to expand its Web-integrated enterprise information gateway with geospatial functionality and integration with an enterprise content management (ECM) system.
- *Enable Strategic Management of Information.* Adoption of IT best practices and security standards should drive consistent, efficient, and secure data and technology management throughout the agency. Enhanced governance processes will be promoted to support the adoption of a more agile service-oriented architecture and increased code reuse.
- *Support a High Performing Next-Generation Workforce.* Several internal strategies and initiatives will be implemented to foster an information centered culture that emphasizes the importance of information as integral to the agency's mission.

Interacting with the Public through the Web

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

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

In fiscal 2009, we integrated access to more of our permit information through our Central Registry application and added access points directly on the home page. Users can access information about a permit stored in different databases through a single query. We plan to continue this integration, which is a specific goal of our Information Strategic Plan.

Also in fiscal 2009, we introduced the Texas Air Monitoring Information System (TAMIS) web application to the public. This application displays ambient air monitoring site and sampling information and allows users to generate and download a variety of data reports. In fiscal 2011, a related web-based geographic interface, GeoTAM, was made available to the public. GeoTAM builds on the information available in TAMIS and provides customers a spatial representation of air quality monitoring sites and samplers throughout Texas.

The Barnett Shale presented a unique challenge for the TCEQ in that this was the first instance in Texas where a significant number of natural-gas production and storage facilities were constructed and operated within heavily populated areas. Perhaps the most important lesson learned by the TCEQ since our efforts on the Barnett Shale began relates to the need for abundant and timely communication with all interested parties. In response to that challenge, the TCEQ developed a Web page specific to potential air issues around the Barnett Shale area. Actions and issues concerning the Barnett Shale area can be found on the TCEQ's Barnett Shale Web page, at <www.tceq.state.tx.us/goto/barnettshale>. The agency also developed an interactive map to show the location of sampling

conducted in the 24-county Barnett Shale area. Once a sampling location is selected, any available sampling data or health effects evaluations will be provided to the requestor. Because of statewide oil and gas issues, numerous compliance resources for oil and gas companies can also be found at the agency's website, at <www.tceq.texas.gov/goto/oilgas>.

We offer online permit application and approval for some stormwater permits and petroleum storage tank registrations, and most recently added online permitting for concentrated animal feeding operations, water quality industrial stormwater multi-sector general permit, and pesticides general permit. We have added new features to the online reporting of discharge monitoring data (NetDMR) available for facilities covered under the Texas Pollutant Discharge Elimination System. We have also introduced online testing for occupational licenses. More transaction capabilities like these will be added in the coming years.

In a significant move to improve usability of our Web content, we are establishing a more customer-focused process for Web content development. This initiative responds to a Sunset Commission recommendation made during the agency's 2010–2011 sunset review. In 2012, we began training all employees who contribute content to the public website to write in plain language.

As part of this same initiative, we are also moving to improve the user experience by ramping up usability assessment and testing for key areas of the website. For 2012, we have targeted improving general public access to permit status and enforcement activities. We are also modifying our Web content management system to introduce folder-based templates. This will allow an improved user experience over time as folders for subjects such as air, land, or water can be modified to have a unique look and feel without altering content created by subject-matter experts.

Finally, the spread of mobile computing requires us to modify our public website to keep pace with our users. In 2011, we launched a basic mobile view of our site and we will continue to refine this access in the future.

Impact of Anticipated Technological Advances

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

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

Taken together, these developments will mean that:

- We will have much more data available, and more powerful tools with which to analyze it and present the results. We will be able to improve our environmental decisions.
- We will be able to provide better service to the regulated community and the public, making interactions with our programs cheaper and quicker.
- We will need to continually adapt our information exchange practices to new environments, providing and accepting information in new ways.
- Our systems will be exposed to more attacks using increasingly sophisticated techniques. We will have to design hardware, software, and network configurations with security in mind.

Degree of Agency Automation, Telecommunications, etc.

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

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

Anticipated Need for Automation (either Purchased or Leased)

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

- The increased participation by external parties in agency policy development and decision making, and the need to be accountable to those parties for agency activities and decisions.
- The need to recognize the business environment by using more regulatory flexibility.
- The need to provide better customer service to the regulated community and the public while providing secure access to information.
- Budget and resource constraints in an era of growing agency responsibilities (growth in population, industry, and regulatory demands).
- Expectations that agency actions and decisions will be taken based on an understanding of risk to the environment and to public health.

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

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

We will continue to maintain information systems that:

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

C H A P T E R 4

Impact of Federal, State, and Legal Actions

Federal Authority

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

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

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

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

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

continued on next page

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

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

Anticipated Changes in Federal Authority

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

Air Quality

Cross-State Air Pollution Rule (CSAPR)

On July 6, 2011, the administrator of the U.S. Environmental Protection Agency (EPA) signed the

Cross-State Air Pollution Rule (CSAPR), which imposed federal implementation plans (FIPs) on Texas and 26 other states to address transport requirements under the federal Clean Air Act 110(a)(2)(D)(i) for the 1997 eight-hour ozone NAAQS and the 1997 and 2006 fine particulate matter ($PM_{2.5}$) NAAQS. The CSAPR was a replacement rule for the federal Clean Air Interstate Rule (CAIR) that was vacated in 2008 by the U.S. Court of Appeals. The court reinstated CAIR in December 2008 until the EPA implemented a replacement rule. The CSAPR requires power plants within the affected states to comply with ozone season nitrogen oxides (NO_x) emission budgets for states included under the rule for the 1997 eight-hour ozone NAAQS and with annual sulfur dioxide (SO_2) and NO_x emission budgets for states included under the rule for the 1997 and 2006 $PM_{2.5}$ NAAQS.

While Texas was only proposed to be included under the CSAPR for the 1997 eight-hour ozone NAAQS with ozone season NO_x emission budget requirements, the EPA finalized the rule with Texas also subject to the particulate matter programs. The EPA assigned Texas annual budgets for NO_x and SO_2 without providing the TCEQ and affected power plants within the state the opportunity to comment on them. The final rule would have required a 47 percent reduction from Texas power plant 2010 SO_2 emissions by 2012.

Since the final rule was signed on July 6, 2011, the EPA has proposed and finalized several revisions to the CSAPR that increased the total states subject to the rule to 28 and made technical adjustments to the CSAPR state emission budgets based on updated information on emission controls already installed at certain power plants. The EPA finalized the budget-revision proposals through two final rules issued on Feb. 7, 2012. The final rule now sets Texas' annual SO_2 budget at 294,471 tons (an increase of 50,517 tons from the budget set in July 2011). Even with these slightly larger emission budgets, this would still require reductions in annual SO_2 emissions by 36 percent from 2010 levels.

The attorney general for the State of Texas filed with the U.S. Court of Appeals for the District of Columbia Circuit a petition for review on Sept. 20, 2011, and a motion for stay of the final rule on Sept. 22, 2011. The rule is also being challenged by Texas electric-generating utilities, including Luminant and San Miguel, **and multiple other parties.** Thirteen other states also filed administrative and legal challenges to the rule. The CSAPR $PM_{2.5}$ program for annual NO_x and SO_2 was scheduled to begin on Jan. 1, 2012, and the ozone season NO_x program on May 1, 2012. However, on Dec. 30, 2011, the U.S. Court of Appeals granted the State of Texas' request to stay the CSAPR. Therefore, the CSAPR is not being enforced by the EPA. Instead, the EPA is currently enforcing CAIR, the predecessor rule to the CSAPR. Oral arguments before the U.S. Court of Appeals were heard on April 13, 2012.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

On Dec. 16, 2011, the EPA administrator signed the final National Emission Standards for Hazardous Air Pollutants (NESHAP) rule for electric utility steam generating units (EGU) that generate electricity for sale. The final utility NESHAP rule, also called Mercury and Air Toxics Standards (MATS) by the EPA, is adopted in Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart UUUUU. The final rule was published in the Feb. 16, 2012, *Federal Register* and became effective April 16, 2012. The new MATS rule establishes maximum achievable control technology (MACT) standards for existing, reconstructed, and new EGUs rated greater than 25 megawatts that are fired on coal, liquid oil, or solid oil-derived (i.e., petroleum coke) fuels as well as for existing and new integrated gasification combined cycle (IGCC) EGUs.

For coal-fired and petroleum coke-fired EGUs, which are the predominant EGUs in Texas affected by it, the MATS rule established MACT emission standards for mercury, acid gases, and non-mercury metal HAPs (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium).

The primary standard for acid gases is a hydrogen chloride emission standard, but an alternate SO_2 surrogate standard is allowed for units equipped with flue gas desulfurization. For non-mercury metal HAPs, affected units must meet either a filterable particulate matter surrogate standard, a total non-mercury metal HAP standard, or the speciated non-mercury metal HAP standards.

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

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

Known Review Schedules for Specific NAAQS

Sections 108 and 109 of the federal Clean Air Act (CAA) govern the establishment, review, and revision, as appropriate, of the NAAQS to provide protection for the nation's public health. The review includes several phases, including Planning, Integrated Science Assessment, Risk/Exposure Assessment, Policy Assessment, and Rulemaking. The CAA requires the EPA to review and, if appropriate, revise the NAAQS every five years. The following describes the current understanding of the schedules for review or anticipated changes to some of the NAAQS.

Ozone

Under the current review schedule, the EPA will propose any appropriate revisions in October 2013 and finalize any revisions to the standard in July 2014.

Lead

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

Particulate Matter Standard (PM_{10} and $PM_{2.5}$)

In an Oct. 14, 2011, letter to several U.S. senators, EPA Administrator Lisa Jackson communicated that based on consideration of the scientific record and advice from the Clean Air Scientific Committee (CASAC), she was prepared to propose the retention–with no revisions–of the current PM_{10} standard and form.

In documents from the EPA dated January 2012, the EPA noted that it plans to propose revisions to the $PM_{2.5}$ standard in June 2012, ahead of a final rule set for June 2013. This followed an appeals court decision that denied a request for the courts to impose a hard legal deadline for the EPA to issue a revised standard. Preliminary indications signal that the EPA may be preparing to lower the annual $PM_{2.5}$ level from 15 micrograms per cubic meter ($\mu g/m^3$) to 11–13 $\mu g/m^3$.

Secondary Standards for Nitrogen Dioxide (NO_2) and Sulfur Dioxide (SO_2)

The EPA sets secondary (welfare-based) standards to protect against environmental damage caused by certain air pollutants. On March 20, 2012, the EPA finalized the retention of the current secondary NAAQS for nitrogen dioxide (NO_2) and sulfur dioxide (SO_2). The existing NO_2 secondary standard is 53 ppb annual arithmetic average, calculated as the arithmetic mean of the one-hour NO_2 concentrations. The existing SO_2 secondary standard is a three-hour average of 0.5 ppm, not to be exceeded more than once per year.

The EPA did not add a new, multi-pollutant standard for NO_2 and SO_2 to address deposition-related effects, but will continue to study the impacts these pollutants have on sensitive ecosystems to aid in considering an appropriate multi-pollutant standard. The CASAC will initiate review; however, no timeline for completion is established at this time.

Water Quality

Waters of the United States

The federal Clean Water Act establishes the federal legal framework for protection of water quality in the United States. The scope or jurisdiction under the federal statute is generally tied to "waters of the United States." The U.S. Supreme Court decisions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* in 2001 and *United States v. Rapanos* in 2006 has led to a wide range of legal opinions as to the definition of "waters of the United States" and therefore the scope of the Clean Water Act. The EPA, U.S. Army Corps of Engineers (Corps), and Department of Justice are preparing a guidance document on how those agencies will interpret the supreme court cases. A draft of the guidance document was published for public comment in 2011. Since the public-comment period closed, on July 31, 2011, no further official draft of the guidance has been officially made available.

Much of the controversy generated by the draft guidance concerns the scope of the Clean Water Act as it relates to intermittent or ephemeral streams and isolated wetlands. In the draft guidance, the EPA and the Corps stated that they expected that the number of waters found to be subject to the jurisdiction of the Clean Water Act will increase under the guidance compared to current federal agency practices.

EPA Pesticide General Permit

On Jan. 9, 2009, the U.S. 6th Circuit Court of Appeals held that Clean Water Act permits are required for all biological and chemical pesticides that leave a residue in water when applied into, over, or near waters of the United States (*National Cotton Council of America v. U.S. EPA,* 553 F.3d 927). As a result of the decision, effective Oct. 31, 2011, the discharge of pesticides must be regulated through the Texas Pollutant Discharge Elimination System (TPDES) program. On Nov. 2, 2011, the TCEQ issued a general permit authorizing the point-source discharge of pesticides for the control of mosquitoes and other insect pests, vegetation and algae, animal pests, area-wide and forest-canopy pests.

While the permit requirements must be met as of Nov. 2, 2011, operators were covered automatically under the permit without submitting a notice of intent (NOI) or self-certification form for 90 days after the effective date. The TCEQ focused on providing compliance assistance and outreach to the regulated community. Since the end of the 90-day period, a total of 17 NOIs have been received and approved by the TCEQ.

Expansion of EPA Stormwater Regulations

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

and evaluated for the possible effects to the TCEQ and the regulated community in Texas.

The EPA has also adopted additional federal effluent guidelines for discharges from construction sites. The TCEQ will implement these requirements in permits authorizing construction stormwater discharges as those permits are renewed.

Waste

Coal Combustion Residuals (CCRs)

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

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

The executive director provided comments on the EPA proposal and noted that existing commission requirements are effective and encourage CCR recycling. These comments pointed out that subjecting CCRs to the hazardous waste regulations would negatively affect their beneficial use and that regulating CCRs under the Subtitle D option is preferred, should the EPA determine that federal regulation is necessary and appropriate.

On Oct. 14, 2011, the U.S. House of Representatives passed legislation (Coal Residuals Reuse and Management Act, HR 2273) to provide statutory direction for the management of CCRs. The legislation seeks to address coal ash recycling and strengthen coal ash disposal regulations without a "hazardous waste" designation for CCRs. The legislation amends Subtitle D of the federal Solid Waste Disposal Act (SWDA) to facilitate recovery and beneficial use, and to require a permitting program for CCR management. Nineteen utilities in Texas are expected to be affected by HR 2273 and required to obtain permits. Similar legislation (SB 1751) was introduced in the U.S. Senate in October 2011. The senate bill was referred to the Committee on Environment and Public Works, which has not acted on the bill as of May 2012. Similarly, HR 2273, which was passed out of the House, is awaiting Senate action. The executive director will continue to track the status of the EPA's proposed rule, SB 1751, and other proposals associated with CCRs to evaluate their impact on the waste program.

In April 2012, the Environmental Integrity Project (EIP) released a report that indicates that at least 49 coal-fired power plants have acknowledged that one or more of their ash ponds or landfills have caused exceedances of either Safe Drinking Water Act "Maximum Contaminant Limits" or state groundwater protection standards. The contamination at 28 of these sites had not been previously identified in the EPA's inventory of sites damaged by coal ash. The 2012 report also includes data submitted to the EPA by the EIP based on its review of state files. The new evidence comes from plants in 15 states, including three in Texas. The three in Texas are Big Brown, Pirkey, and Sandow. For example, Pirkey groundwater data show exceedances for arsenic, chromium, and lead.

The executive director does not have statutory authority under the Texas SWDA (Sec. 361.090) to permit the on-site disposal of nonhazardous industrial solid waste (i.e., discarded CCRs). If Texas chooses to implement a program as envisioned by HR 2273, the Texas SWDA and commission rules would have to be amended to implement HR 2273.

Oversight of Radioactive Materials

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

There are several rule versions in progress that will affect Texas implementation of radioactive materials regulation. Currently in progress is a rule revision for low-level radioactive waste disposal by the NRC that includes changes to guidance and other federal position documents. Another rule revision in progress is for radiation-dose standards for the public and workers at both TCEQ and licensees' sites by the NRC.

The 82nd Legislature

Sunset Legislation

On May 28, 2011, the Texas Senate and the Texas House of Representatives adopted the TCEQ Sunset legislation, HB 2694. The legislation continues the agency for 12 years. HB 2694 was signed by the governor on June 17, 2011. The legislation contains the following key elements:

- Continues the Texas Commission on Environmental Quality for 12 years, until 2023.
- Requires that TCEQ commissioners resign their position if they accept contributions for a campaign for an elected office.
- Provides direction to the TCEQ to focus its efforts on the most hazardous dams in the state. The bill also allows the agency to enter into agreements with dam owners regarding the dam or spillway adequacy, including timelines to comply. The bill exempts privately owned dams that impound less than 500 acre-feet and are either low- or insignificant-hazard dams.
- Transfers, on Sept. 1, 2011, the authority for making groundwater-protection recommendations regarding oil and gas activities from the TCEQ to the Railroad Commission (RRC). The bill authorizes the RRC, and not the TCEQ, to issue letters of determination associated with geologic storage of anthropogenic carbon dioxide (CO_2).
- Requires the executive director to provide assistance and education to the public on environmental matters under the agency's jurisdiction. The bill focuses the efforts of the Public Interest Counsel (PIC) on representing the public interest in matters before the commission. The bill requires the commission to define, by rule, the factors that the PIC must consider in representing the public interest.
- Calls for changes to the current requirements for the Compliance History program. These changes require the TCEQ to adopt a general enforcement policy, by rule, that includes calculating penalties to reduce an economic benefit gained through noncompliance. The bill increases the maximum to $25,000 for almost all penalties and $5,000 for others, such as water-rate penalties. The bill also adds language to allow local governments to apply penalty dollars levied on them by the commission toward the cost of compliance in the form of a Supplemental Environmental Project.
- Expands the use of the PST remediation fee to remove underground or aboveground storage tanks if certain criteria are met. The bill reinstates common carrier liability and provides affirmative-defense conditions for common carriers of petroleum products and reauthorizes the PST remediation fee at the current level with no expiration date.
- Requires water-right holders to provide monthly water-use reports to the commission upon

request during times of drought or emergency shortages of water or to respond to a complaint. The bill authorizes the executive director to temporarily suspend a water right and adjust the diversion of water between water-right holders in a "period of drought or other emergency shortage of water," based on Texas Water Code, sections 11.024 and 11.027.

- Directs the executive director to evaluate at least once every five years whether a watermaster should be appointed in water basins not covered under the jurisdiction of a watermaster. The results of the evaluation and subsequent recommendations would be reported to the commission.
- Requires that the waste disposal fee associated with a low-level radioactive waste disposal compact must include funds to support the activities of the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDCC) and creates a dedicated TLLRWDCC Account.
- Eliminates three existing water and wastewater utility application fees: rate changes; CCNs; and sale, transfer, or merger of a CCN.
- Abolishes the Texas On-site Wastewater Treatment Research Council (TOWTRC) and transfers its duties to the TCEQ effective Sept. 1, 2011.
- Allows e-mail to be used by public utilities and cities to send required notices of rate changes and for the public to send statements of intent.
- Provides changes to the Contested Case Hearing (CCH) process, including prohibiting a state agency from contesting the issuance of a permit or license by the commission under this subsection. The bill also requires the executive director to participate as a party in contested case hearings.

Budgetary Issues

The TCEQ will receive $692 million for the 2012–13 biennium, which began Sept. 1, 2011. This represents a reduction of $274 million from 2010–11 levels. Several programs were affected by this reduction:

- The Texas Emissions Reduction Plan (TERP) received $114 million for the biennium, with a contingency appropriation of $8 million per year if revenue exceeds the biennial revenue estimate (BRE), a potential reduction of 50 percent.
- The Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) and the Local Initiative Projects (LIP) are funded at $12.5 million for the biennium, an 88 percent reduction from the 2010–11 biennium.
- The Petroleum Storage Tank (PST) program was appropriated $43.9 million for the biennium, a decrease of $8.3 million from the 2010–11 biennium.
- Superfund was appropriated $48.26 million for the biennium, a decrease of $13.3 million from the 2010–11 biennium.
- TCEQ grant programs received a 50 percent reduction from 2010–11 levels. Air Quality Planning was appropriated $3.57 million and Regional Solid Waste Planning was appropriated $10.89 million for the biennium.

The agency's FTE cap, which reflects a 235 reduction from the 2010–11 biennium, is 2,766.2. However, 9 FTEs in the surface casing program will be transferred to the Railroad Commission and 4 FTEs will be added for the Aggregate Production program. The net will be 2,761.2 FTEs for 2012–13.

Air Quality Issues

The significance and importance of improving air quality and reducing emissions continues to be recognized by the Legislature through the passage of legislation that established three new grant programs under the Texas Emissions Reduction Plan (TERP): the Texas Natural Gas Vehicle Grant Program (TNGVGP), to fund replacement or repower of existing vehicles with natural-gas vehicles; the Clean Transportation Triangle (CTT) Program, to fund natural-gas fueling stations; and an alternative fueling facilities program. SB 20 and SB 385 specify that of the 87.5 percent of the money

allocated to the emissions-reduction incentive programs, not less than 16 percent would be allocated to the TNGVGP, not more than 4 percent would be allocated for the CTT Program, and up to 2 percent could be used for the alternative fueling facilities program.

With the increase in oil and gas drilling in the state, legislation was passed to create a new air-monitoring program in the Barnett Shale area. SB 527 specifies that funding should be used to establish a regional air-monitoring program. Additionally, legislation was passed in response to the new permitting requirements for oil and gas production sites in the Barnett Shale area that the agency adopted in January 2011. SB 1134 prohibits the TCEQ from promulgating new or amending existing authorizations for the oil and gas industry without performing a regulatory impact analysis, extensive monitoring, and credible modeling, and considering geographical limitations.

Water Resource Issues

The unprecedented drought Texas has experienced has caused the TCEQ to face issues that it has never managed before. New water supplies and conservation will continue to be an important part of meeting the future water resource needs of Texans. As a result of HB 2694, the executive director was provided with the express authority to suspend or adjust water rights during times of drought or emergency shortage of water. On making these decisions, the executive director must consider preferences of use and implementation of water conservation plans and drought contingency plans, as well as other factors.

The TCEQ has proposed rules that define drought or other emergency shortage of water and specify conditions and terms under which the executive director may exercise authority. The TCEQ intends to continue to consider whether to suspend or adjust municipal and power-generation water rights based on public health and welfare concerns. HB 2694 also requires the TCEQ's executive director to assess the need for watermaster programs at least once every five years in basins where programs do not currently exist. The executive director will be evaluating the Brazos, Brazos-Colorado Coastal, Colorado, and Colorado-Lavaca Coastal basins in 2012.

A priority groundwater management area (PGMA) is an area designated and delineated by the TCEQ that is experiencing, or expected to experience within 25 years, critical groundwater problems, including shortages of surface water or groundwater, land subsidence resulting from groundwater withdrawal, and contamination of groundwater supplies. Since the ultimate purpose of designating a PGMA is to ensure the management of groundwater in areas of the state with critical groundwater problems, a PGMA evaluation will consider the need for creating groundwater conservation districts and different options for doing so. Such districts are authorized to adopt policies, plans, and rules that can address critical groundwater problems.

SB 313 increases the evaluation period for possible PGMA designation from 25 years to 50. SB 313 amends current law relating to priority groundwater management areas. As water supply becomes more challenging with the state's growing population, water management for the future is vital to the state. Extending the horizon to 50 years allows for more comprehensive projections and corresponds to current statewide planning processes, such as the State Water Plan.

Water Utility Issues

A certificate of convenience and necessity (CCN) is a permit from the state that delineates a water or sewer utilities service area and requires the CCN holder to provide continuous and adequate service to anyone in their defined area that pays all the required fees and otherwise meets all the application requirements. Landowners may petition the TCEQ to be released from a CCN. SB 573 created a new expedited release process for landowners in specific counties with at least 25 acres who are not receiving service. The bill also deleted the current petition requirement for revoking a CCN, and modified the requirements in the original process for petitioning for release from a CCN. The bill also shortened the TCEQs review period from

90 to 60 days for the landowners with 50 acres or more. For landowners in those specified counties with 25 acres meeting the requirements, the TCEQ is required to approve all petitions. Under the bill, the TCEQ also may not deny a petition based on the fact that a CCN holder is a borrower under a federal loan program. The bill also modified the requirements for municipal consent to a CCN located outside its corporate boundaries or extra-territorial jurisdiction (ETJ), and provided that a municipality's ability to extend its CCN outside the ETJ is subject to landowner consent.

Examples of Bills from the 82nd Legislature Affecting the TCEQ

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

House Bills

HB 1 (Pitts)	TCEQ Appropriations for fiscal years 2012 and 2013. Biennial appropriation of $693.2 million.
HB 444 (Creighton)	Requires the TCEQ to submit a copy of an application for an industrial and hazardous waste injection well to the groundwater conservation district in which the injection well lies.
HB 451 (Lucio III)	Requires the TCEQ to establish a "Don't Mess with Texas Water" program to prevent illegal dumping that affects surface waters of the state.
HB 571 (Huberty)	Creates a new aggregates registration and inspection program. Requires aggregate production operations to register annually with the TCEQ. Requires the TCEQ to survey the state annually for aggregate production facilities, inspect each aggregate production operation every three years, and establish registration fees.
HB 610 (Zerwas)	Requires the Office of the Chief Clerk to transmit notices, orders, and decisions issued by the TCEQ to state legislators by electronic mail unless the legislator specifically requests to have notice by mail.
HB 805 (Callegari)	Changes the population threshold in the definition of an affected utility from 400,000 to 350,000. Specifies the date emergency preparedness plans are to be submitted and implemented for affected utilities in newly affected counties.
HB 965 (Callegari)	Requires the TCEQ to accept internet-based continuing education programs for occupational licenses issued by the TCEQ.
HB 1981 (Smith, W.)	Modifies the TCEQ's current Air Pollutant Watch List (APWL) process, including changes to the requirements for publishing notice and allowing public comment.
HB 2280 (Eiland)	Adds the requirement that at least one member of the Tax Relief for Pollution Control Property Advisory Committee be a representative of a school district or a junior college district in which property is or was previously subject to a property tax exemption for pollution control equipment.
HB 2694 (Smith, W.)	Continues the TCEQ for 12 years, until 2023. Also makes changes to several program areas, such as focusing the Dam Safety Program on the most hazardous dams in the state, transferring the authority for making groundwater protection recommendations regarding oil and gas activities to the Railroad Commission, and increasing the maximum to $25,000 for almost all penalties.

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Senate Bills

SB 20/385 (Williams)	Establishes three new grant programs under TERP: the natural-gas-vehicle rebate program, a program to fund natural-gas fueling stations, and an alternative fueling facilities program.
SB 329 (Watson)	Creates a television equipment recycling program. Includes shared responsibility among consumers, retailers, manufacturers, and the state government for recycling covered television equipment.
SB 341 (Uresti)	Requires the TCEQ to act as conservator for the Bexar Metropolitan Water District until an election can be held. Allows the TCEQ to contract out the responsibilities. Requires the TCEQ to conduct an on-site evaluation of Bexar Met.
SB 408 (Estes)	Changes the timing for taking the two required water quality samples on the John Graves Scenic Riverway and conducting the two required surface visual inspections from summer and winter to spring and fall of each year.
SB 527 (Fraser)	Eliminates the New Technology Research and Development (NTRD) program and creates a new regional air-monitoring program.
SB 1134 (Hegar)	Prohibits the TCEQ from promulgating new or amending existing authorizations (permits by rule [PBR] or standard permits [SP]) for the oil and gas industry without performing a regulatory impact analysis (RIA), extensive monitoring, and credible modeling, and considering geographical limitations.
SB 1258 (Duncan)	Allows the TCEQ to issue a permit by rule to enable counties or municipalities with a population of 10,000 or less to dispose of demolition waste from buildings that are abandoned or found to be a nuisance. Disposal could only occur on land that is owned by the county and would qualify for an arid exemption.

Significant Court Cases

Decided Cases

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

129 S. Ct. 1870 (2009)

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

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

affect the agency's ability to recover some of those costs under CERCLA.

South Coast Air Quality Management District v. U.S. Environmental Protection Agency

472 F.3d 882 (D.C. Cir. 2006), amended by 489 F.3d 1245 (D.C. Cir. 2007), cert. denied, 128 S. Ct. 1065 (2008)

Case Summary: This case challenged the EPA's final eight-hour ozone National Ambient Air Quality Standards (NAAQS) Phase I Implementation Rule. Phase I addressed classifications, anti-backsliding provisions, one-hour ozone revocation, and other requirements for mandatory and discretionary control measures for the eight-hour ozone NAAQS. The court issued an opinion on Dec. 22, 2006, vacating and remanding the Phase I Rule. The court upheld the revocation of the one-hour ozone standard, but rejected the EPA's classification of certain areas under Subpart 1 of the federal Clean Air Act. Additionally, the court found that the anti-backsliding provisions of the Clean Air Act require that new-source-review provisions that applied under the one-hour ozone standard continue to apply under the eight-hour standard; fees under Section 185 of the Clean Air Act must be enforced under the one-hour standard; contingency plans under the one-hour standard must remain in place; and motor-vehicle emission budgets for the one-hour standard must be retained under the eight-hour standard. Upon rehearing, this opinion was limited to a partial vacatur and remand on June 7, 2007. The U.S. Supreme Court denied a petition for further review on Jan. 14, 2008.

Impact on the TCEQ: At this time, the EPA has still not finalized rulemaking responding to the vacatur and remand, so not all impacts to the TCEQ are known. Potential impacts include additional air quality planning requirements for assuring that all antibacksliding requirements are met for the one-hour ozone NAAQS, the 1997 eight-hour ozone NAAQS, and all future NAAQS. The decision will potentially require the TCEQ to develop and submit additional revised plans for attainment and maintenance of the eight-hour ozone NAAQS. Additionally, since the Houston-Galveston-Brazoria (HGB) area did not attain the one-hour ozone standard by its attainment date of Nov. 15, 2007, Section 185 of the Clean Air Act requires penalty fees to be paid by major sources of volatile organic compounds and nitrogen oxides in the HGB area (referred to as Section 185 fees).

The EPA released guidance regarding the Section 185 fees on Jan. 5, 2010, indicating that states could submit equivalent alternative programs for EPA review to fulfill the fee obligation; and that no fee obligation program is required if a state can demonstrate that the area is attaining either the one-hour or 1997 eight-hour ozone standard due to permanent and enforceable control measures. However, the EPA was sued over the issuance of this guidance, and the D.C. Circuit Court has ruled that the issuance of the guidance was improper under the Federal Administrative Procedures Act. Lastly, the EPA promulgated a revised eight-hour ozone NAAQS in 2008, which the EPA is now implementing after lengthy delays due to reconsideration of the standard, which the EPA declined to finalize.

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

(Stephen L. Johnson as EPA Administrator, and Richard Greene as EPA Region VI Regional Administrator) Cause No. 3-08CV1491-G (U.S. Dist. Court, Northern Dist. of Texas, filed Aug. 25, 2008)

Case Summary: Plaintiffs filed suit against the EPA regarding the EPA's failure to perform its nondiscretionary duty under the federal Clean Air Act to act (or, in some cases, fully act) on more than 30 air permitting rules adopted from approximately August 1993 to March 2007 by the TCEQ and its predecessor agencies. The issue is whether the EPA will approve these rules submitted by the TCEQ to the EPA as revisions to the State Implementation Plan (SIP), as required by the Clean Air Act. The majority of the rules are related to New Source Review (NSR) permitting. The case was settled with the parties agreeing to a

schedule for EPA action on the rules by Dec. 31, 2013. On Oct. 19, 2009, the court entered an Order granting a Joint Motion to Stay Case, entering the previously lodged Consent Decree, which memorialized the settlement between the parties.

Impact on the TCEQ: For rules approved as SIP revisions by the EPA, there will be no impact on the TCEQ. Any rules that the EPA disapproves as a SIP revision will not be a part of the TCEQ's approved permitting programs and will not be federally enforceable. Any disapproval will require the TCEQ to conduct additional rulemaking and make changes in implementation of the NSR permitting program to conform with requirements of the Clean Air Act. In addition, certain disapprovals can lead to sanctions unless the TCEQ timely corrects the deficiencies, which affects the state by the loss of highway funding and grant money.

North Carolina v. U.S. Environmental Protection Agency

531 F.3d 896 (D.C. Cir. 2008)

Case Summary: This case remanded the EPA's final Clean Air Interstate Rule (CAIR) that established a regional cap-and-trade program for nitrogen oxides and sulfur dioxide from electric-generating units to reduce emissions in 28 eastern states (including Texas) and the District of Columbia.

Impact on the TCEQ: The decision remanding the CAIR will affect how Texas develops and submits plans for demonstrating how the state is addressing the transport of fine particulate matter (PM 2.5) and ozone pollution to other states.

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

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

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

The case was assigned to the 6th Circuit Court of Appeals. On Jan. 7, 2009, the court held that the final rule was not a reasonable interpretation of the CWA and vacated the rule. The EPA had argued that the residue from the application of pesticides was not discharged from a point source, meaning the residue cannot be subject to the permitting program because by the time it becomes a pollutant it is no longer from a point source. The court disagreed and said the pesticides originate from an applicator, which is a point source, and therefore a permit is required. The 6th Circuit held that CWA permits are required for all applications of biological and chemical pesticides that leave a residue in water when such applications are made in or over, or near, U.S. waters. The EPA estimates that the ruling will affect approximately 365,000 applicators that perform 5.6 million pesticide applications annually. On April 9, 2009, the EPA chose not to seek rehearing on the case. Instead, it filed a motion to stay issuance of the court's mandate for two years to allow the EPA time to develop, propose, and issue a final National Pollutant Discharge Elimination System (NPDES) general permit for pesticide applications, for states to develop permits, and to reach out to and educate the regulated community. On Feb. 22, 2010, the U.S. Supreme Court denied certiorari in response to non-EPA parties.

Impact on the TCEQ: Since the U.S. Supreme Court denied certiorari in this case, the EPA can require the TCEQ to regulate pesticides under its

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

American Petroleum Institute v. Johnson

541 F. Supp. 2d 165 (D. D.C. 2008)

Case Summary: The U.S. District Court for the District of Columbia vacated the EPA's definition of *navigable waters* in the Spill Prevention, Control, and Countermeasure regulations (SPCC Rule), 40 CFR 112. The regulations require certain oil-processing facilities to prepare a plan to prevent oil spills and provide countermeasures to address discharges of oil into "navigable waters." When the EPA amended the SPCC Rule in 2002, it adopted a broad definition of "navigable waters" that included all waters that "could affect interstate or foreign commerce," tributaries to those waters, and adjacent wetlands.

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

Entergy Corp. v. Riverkeeper, Inc.

129 S. Ct. 1498 (2009)

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

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

The court in this case determined that Section 316(b) of the Clean Water Act, which authorizes the EPA to regulate cooling-water intake structures at power plants, does not prohibit the EPA from engaging in cost-benefit analysis. The court held that the EPA permissibly relied on cost-benefit analysis in setting the national performance standards for cooling-water intake structures at power plants and in allowing for cost-benefit variances from the standards for existing power plants.

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

Friends of the Everglades v. South Florida Water Management District

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

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

The Court of Appeals noted that the EPA's regulation was entitled to deference if it was a reasonable construction of an ambiguous statute. The court concluded that the statutory language was ambiguous and moved on to consider whether the EPA's regulation, which accepts the "unitary waters theory" that transferring pollutants between navigable waters is not an "addition . . . to navigable waters," was a permissible construction of that wording. The court concluded that the EPA's regulation adopting the "unitary waters theory" was reasonable, and therefore a permissible construction, and that unless the EPA rescinds or Congress overrides the regulation, the court must give effect to it. This case is still pending before the 11th Circuit because of the multiple challenges to the EPA water-transfer rule. The cases were consolidated and the State of Texas joined Colorado and New Mexico's amicus brief urging the 11th Circuit to apply the "plain language text" of the CWA in upholding the EPA's water-transfer rule. A petition for certiorari was filed by Friends of the Everglades on Aug. 5, 2010. The petition was denied on Nov. 29, 2010.

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

South Florida Water Management District v. Miccosukee Tribe of Indians

541 U.S. 95, 124 S. Ct. 1537 (2004), rehearing denied 541 U.S. 1057 (2004)

Case Summary: The case involved the flood control and pumping operations of a water-management district within Florida's Everglades. The 11th Circuit Court of Appeals had affirmed the district court's ruling that the pumping station between two canals required a National Pollutant Discharge Elimination System (NPDES) permit. The case was appealed to the U.S. Supreme Court and in 2003, the State of Texas filed an amicus brief supporting the South Florida Water Management District based on the premise that state law controls water-right allocations.

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

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

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

Case Summary: In this case, the 9th Circuit held that the discharge of unaltered groundwater into surface water required a National Pollutant Discharge Elimination System (NPDES) permit, reasoning that, because the groundwater altered the quality of the receiving water, it was a pollutant. At issue was whether unaltered groundwater produced from the coal-bed methane extraction process was a "pollutant" under the Clean Water Act, and, if so, whether Montana state law could exempt that water from the CWA's permitting requirements for discharge of a pollutant. The 9th Circuit concluded that the water was a pollutant subject to regulation under the CWA. Looking at the plain language of the statute, the court reasoned that the water was a pollutant because it was an industrial waste, even though it was unaltered groundwater, since *industrial waste* includes "any useless byproduct derived from the commercial production and sale of goods and services."

The court also determined that the water was a "pollutant" under EPA regulations governing "produced water," even if extraction did not add any pollutants to the water. The court focused on the effect of the discharge on the receiving water, citing the CWA's "antidegradation policy," and found that discharge of the water caused pollution under the CWA because it altered the quality of the receiving water. The court explained that the CWA's requirement that the physical, biological, or chemical integrity of the water be a "man-induced" alteration refers to the effect of the discharge on the receiving water; it does not require that the discharged water itself be altered by humans. After concluding that the discharge of unaltered groundwater was subject to regulation under the CWA, the court concluded that neither the EPA nor the state of Montana had authority to exempt discharges otherwise subject to the CWA, because only Congress may amend the CWA to create exemptions from regulation. In the latest action, the 9th Circuit vacated the lower court's order imposing sanctions on Northern Plains Research Council (185 Fed. Appx. 679).

Impact on the TCEQ: This case has the potential to affect the types of discharges that require authorization under a TPDES permit issued by the TCEQ. Although the RRC regulates discharges associated with oil, gas, and geothermal exploration and development in Texas, this opinion is broad enough to encompass discharges of unaltered groundwater into surface water. Parties whose operations involve infiltrated or extracted groundwater that will be discharged into waters of the state may need to obtain a TPDES permit if the discharge affects the chemical, physical, or biological integrity of the receiving waters. This could become an issue if the agency receives an application from a regulated entity, not subject to RRC jurisdiction, for a permit to discharge unaltered groundwater into surface water.

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

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

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

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

Case Summary: This case addressed the scope of the U.S. Army Corps of Engineers' authority to regulate navigable waters under Section 404 of the Clean Water Act (CWA). The case resulted in a plurality opinion, with two tests for determining whether certain waters are jurisdictional waters for purposes of Section 404(b) of the CWA. The plurality held that, due to the difficulty involved in drawing the line between wetlands and traditional navigable waters, "waters of the United States" includes those wetlands with a continuous surface connection to bodies that are "waters of the United States" in their own right. Justice Kennedy's concurring opinion set forth a "significant nexus" test, which states that if a water body substantially affects the physical, chemical, and biological integrity of the navigable water body, then it is jurisdictional.

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

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

The TCEQ is responsible for conducting Section 401 water quality certifications of the Corps Section 404 permits for discharge of dredged or fill material into waters of the United States, including wetlands. The purpose of these reviews is to determine whether a proposed discharge will comply with state water quality standards. The determination of whether certain waters are jurisdictional will determine which permits require these certifications. In April 2011, the EPA published a draft guidance that sets out how the EPA and the U.S. Army Corps of Engineers (USACE) will identify waters protected by the Clean Water Act (CWA) and implement the supreme court's decisions concerning the extent of waters covered by the CWA in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* and *Rapanos v. United States* as well as *United States v. Riverside Bayview Homes*. The EPA also plans to engage in rulemaking after the draft guidance is finalized.

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

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

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

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

Case Summary: The case involved an environmental group's challenge to EPA rules regarding concentrated animal feeding operations (CAFOs). The case arose from EPA attempts to address *Waterkeeper Alliance v. U.S. Environmental Protection Agency,* 399 F. 3d 486 (2d Cir. 2005). In the *Waterkeeper* case, the 2nd Circuit found that the Clean Water Act prevents the EPA from imposing on CAFOs the obligation to seek a National Pollutant Discharge Elimination System (NPDES) permit or to demonstrate that there is no potential for discharge. In 2008, in response to *Waterkeeper,* the EPA promulgated revised rules. The revised rule established the CAFOs that must apply for NPDES permit coverage and when they must do so. The 2008 rule eliminated the 2003 rule's requirement that all CAFOs apply for NPDES permits unless they demonstrate that they have "no potential to discharge" and instead required only those CAFOs that "discharge or propose to discharge" to seek permit coverage. Further, the 2008 rule created a requirement that any CAFO operator with the potential to discharge either: (1) apply for permit coverage, or (2) operate in accordance with a set of so-called "eligibility criteria" that incorporated the same conditions (effluent limitations) that would be imposed under a permit.

Petitioners representing the pork, poultry, and dairy industries sought judicial review of the revised rules. The petitioners argued that under the Clean Water Act, the EPA may only regulate actual discharges, not "proposed" discharges, as promulgated in the 2008 rules. The 5th Circuit agreed with the petitioners and remanded that part of the 2008 rules to the EPA. As of March 1, 2012, the EPA is still attempting to modify the federal CAFO rules to comply with the *Waterkeeper* and NPPC decisions regarding "the duty to apply."

Impact on the TCEQ: The TCEQ has independent regulatory authority to require all CAFOs to obtain permits, including those with only a potential to discharge. Current TCEQ regulations allow the discharge of manure, sludge, or wastewater from management units or retention control structures into water in the state under certain conditions (e.g., chronic or catastrophic rainfall events). Absent such an event, a discharge of wastewater is prohibited. The impact of this case, following EPA modification of the federal CAFO rules, is uncertain and dependent on the EPA's interpretation of "potential to discharge."

Florida Wildlife Federation v. Jackson

No. 4:08cv324-RH/WCS, 2012 WL 537529 (N.D. Fla, Feb. 18, 2012)

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

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

Impact on the TCEQ: If the EPA were to determine that the TCEQ's nutrient criteria are not consistent with the CWA, the EPA could promulgate water

quality standards similar to Florida's in Texas. In the proposed rules for Florida, the EPA proposed numerical criteria for a variety of water bodies that Texas does not currently have numerical criteria for.

Conoco Phillips Co. et al. v. U.S. Environmental Protection Agency et al.

612 F.3d 822 (5th Cir. 2010)

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

Riverkeeper and the EPA jointly filed a motion to remand the rule as it applies to existing facilities in light of the supreme court's decision in *Entergy Corp. v. Riverkeeper, Inc.,* 556 U.S. 208 (2009). The 5th Circuit Court of Appeals granted the motion to remand.

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

On April 20, 2011, the EPA proposed rulemaking combining Phase II and Phase III into one rulemaking to protect aquatic organisms affected by cooling water intake structures (76 FR 22174 [April 20, 2011]). The comment period closed on Aug. 18, 2011 (76 FR 43230 [July 20, 2011]).

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

Northwest Environmental Defense Center v. Brown

640 F.3d 1063 (9th Cir. 2011)

Case Summary: The Northwest Environmental Defense Center (NEDC) sued the Oregon State Forester and members of the Oregon Board of Forestry and various timber companies, asserting that "stormwater runoff from logging roads that is collected in a system of ditches, culverts, and channels, and is then delivered into streams and rivers, is a point-source discharge subject to National Pollutant Discharge Elimination System (NPDES) permitting under the CWA." The defendants "contend that the Silvicultural Rule exempts such runoff from the definition of point-source discharge, and thus exempts it from the NPDES permitting process. Alternatively, the defendants contend that the 1987 amendments to the CWA and regulations implementing those amendments also exempt such runoff from the definition of point-source discharge and from the permitting process."

The court held that "stormwater runoff from logging roads that is collected by and then discharged from a system of ditches, culverts, and channels is a point-source discharge for which an NPDES permit is required." In addition, the court held that the "1987 amendments to the CWA do not exempt from the NPDES permitting process stormwater runoff from logging roads that is collected in a system of ditches, culverts, and channels, and is then discharged into streams and rivers. This collected runoff constitutes a point-source discharge of stormwater "associated with industrial activity" under the terms of sections 502(14)

and 402(p). Such a discharge requires an NPDES permit." The court explained that "if [logging] activity is industrial in nature, and EPA concedes that it is [*see* SIC 2411], EPA is not free to create exemptions from permitting requirements for such activity." Petitions for certiorari were filed on Sept. 13, 2011.

Impact on the TCEQ: Petitions for review have been submitted to the U.S. Supreme Court. The U.S. Supreme Court sought briefing from the EPA in December 2011. The TCEQ is closely monitoring this case. If this decision stands, the TCEQ would have to revise its TPDES program to require authorization for the silvicultural activities described in the case.

Edwards Aquifer Authority v. Day

___ S.W.3d ___, 2012 WL 592729 (Tex.)

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

In the trial court, both sides filed motions for summary judgment. The trial court granted the Days' motion and reversed and remanded to the EAA to issue permits in a larger amount (the amount to irrigate 150 acres of land), finding that the groundwater that went in the lake was still groundwater. The trial court did not grant the EAA's motion for summary judgment on the Days' "takings claims," in which it had argued that the Days did not have a vested right to the groundwater. The court of appeals held that the water became surface water when it entered the watercourse and that the Days did have a vested right to the groundwater under their land. The court remanded to the EAA to render judgment affirming the EAA's final order. Both parties filed a petition for review in the Texas Supreme Court in February 2009. Additionally, the State of Texas filed a Response to the Petition for Review on May 20, 2009, on the specific issue of the legal status of groundwater and when it is considered state surface water for the purpose of administering water rights. The case was argued in the Texas Supreme Court on Feb. 17, 2010.

The supreme court issued an opinion on Feb. 24, 2012. The court affirmed the court of appeals and remanded for further proceedings. The court held that groundwater is a vested real property right in place, and therefore the EAA's actions were subject to taking claims. The court held that it did not have enough information on which to rule on the Days' taking claim and remanded to the trial court on that issue.

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

Impact on the TCEQ: The supreme court affirmed the holding that once groundwater enters a watercourse, it becomes state water unless the owner exercises control over the groundwater or has obtained authorization to transport the groundwater. If the court had held otherwise, it could have affected the water-rights program. The issue of the reuse of groundwater is still unclear.

Sackett v. U.S. Environmental Protection Agency

132 S. Ct. 1367, 2012 WL 932018 (U.S. March 21, 2012) (No. 10-1062)

Case Summary: Michael and Chantell Sackett (Sacketts) owned .63 acres of undeveloped property

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

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

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

The court found that the compliance order had many attributes of "finality" that previous supreme court cases had established. The order determined rights or obligations, legal consequences "flowed" from issuance of the order, and issuance of the order marked the "consummation" of the EPA's decision-making process. The court also concluded that the Sacketts had no other adequate remedy in a court because judicial review of CWA enforcement cases usually comes by way of a civil action brought by the EPA, but the Sacketts were unable to initiate this process and faced fines for every day the order was not complied with. Furthermore, a remedy that could be obtained from another agency is not considered to be an adequate remedy with respect to the agency at which the original case arose. Finally, the court found that the CWA did not preclude pre-enforcement judicial review either expressly or by inference. Therefore, the court held that the Sacketts may bring a civil action under the APA challenging the issuance of the EPA's order because the order was a final agency action for which there is no adequate remedy other than APA review, and the CWA did not preclude that review. In the latest action, the 9th Circuit remanded the case to the district court for processing pursuant to the supreme court's opinion (2012 WL 1551278).

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

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

Pending Cases

EPA Water Transfer Rule and Cases Challenging the Rule

– Rule became effective Aug. 12, 2008

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

Lawsuits Directly Challenging the Rule in Federal District Courts

Friends of the Everglades v. U.S. Environmental Protection Agency
No. 08-13652-CC (11th Cir., consolidated Sept. 10, 2008) (pending)

Catskill Mountains Chapter of Trout Unlimited, Inc. v. U.S. Environmental Protection Agency
No. 08-cv-05606-KMK (S.D. N.Y., consolidated Oct. 8, 2008) (stayed)

Friends of the Everglades v. United States
No. 08-cv-21785-CMA (S.D. Fla., consolidated Sept. 18, 2008) (stayed)

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

Friends of the Everglades v. U.S. Environmental Protection Agency
Nos. 08-13652-CC, 08-13653-CC, 08-13657-CC, 08-14921-CC, 08-16270-CC, 08-16283-CC, and 09-10506

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

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

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

State of New Mexico v. United States
Docket No. 11-CV-691JP; U.S. Dist. Court, New Mexico

Case Summary: New Mexico sued the United States of America, particularly the Bureau of Reclamation, on Aug. 8, 2011, complaining of its operation of the Rio Grande Project (Elephant Butte and Caballo Reservoirs in New Mexico) and of an operating agreement entered into in 2008. The court ordered the El Paso District and Elephant Butte Irrigation District in New Mexico to be parties in the case. New Mexico contends that Texas is illegally taking millions of gallons of New Mexico's Rio Grande water under the 2008 agreement between the U.S. Bureau of Reclamation and irrigators in southern New Mexico and El Paso. The agreement dictates how water will be accounted for and released from Elephant Butte.

Impact on the TCEQ: There is a Rio Grande Compact that allocates the water in the project, but the operation of the reservoirs is still contentious. Texas'

interest is in obtaining all of its authorized water from the project.

State of New Mexico v. United States of America, et al.

U.S. Dist. Court, New Mexico

Case summary: The State of New Mexico has filed litigation to invalidate an operating agreement executed in 2008 by the Bureau of Reclamation, Elephant Butte Irrigation District (New Mexico), and the El Paso Water Improvement District No. 1 (Texas). The operating agreement was executed after 20 years of negotiations to ensure that Texas' rights under the Rio Grande Project and the Rio Grande Compact are protected. New Mexico's continued expansion of groundwater pumping since the date of the compact continues to deplete Texas' water supplies. The operating agreement served as a compromise to this issue. Secondly, New Mexico asserts that the Bureau of Reclamation violated terms of the Rio Grande Compact in delivering water to the two irrigation districts in 2011.

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

Aqua Water Supply Corporation v. City of Elgin; Austin Community College District Public Facility Corporation; Bryan W. Shaw, Buddy Garcia, Carlos Rubinstein, and Zak Covar

Civil Action No. 1:11-CV-885-LY (U.S. Dist. Court., Austin, filed Oct. 7, 2011)

Case Summary: The lawsuit was filed in response to the TCEQ's approval of a petition filed by Austin Community College (ACC) for the expedited release of 98 acres from Aqua WSC's CCN. The lawsuit alleges that (1) Elgin's actions constitute improper and prohibitive competition with Aqua WSC; (2) Texas Water Code 13.254(a-6) unconstitutionally attempts to preempt 7 U.S.C. 1926 (in violation of the Supremacy Clause of the U.S. Constitution); and (3) the actions of ACC, TCEQ, Zak Covar, and the TCEQ Commissioners constitute an attempt to deprive Aqua WSC of its federal right under 7 U.S.C. 1926(b).

Impact on the TCEQ: If TWC 13.254(a-6) is declared unconstitutional, the TCEQ will be required to stop processing release applications filed pursuant to that section and will be required to repeal any rules adopted to implement this provision.

Northwest Environmental Advocates v. Gutierrez

No. 3:09-cv-17 (D. Or., filed Jan. 6, 2009)

Case Summary: This case relates to Oregon's coastal nonpoint-source pollution-control plan under the Coastal Zone Act Reauthorization Amendments of 1990. On Dec. 19, 2008, the Northwest Environmental Advocates (NWEA) submitted to the National Oceanic and Atmospheric Administration (NOAA) and the EPA a notice of intent to sue if the agencies could not prove that they consulted under Section 7 of the Endangered Species Act when conditionally approving and fully funding Oregon's Coastal Nonpoint Pollution Control Program. On Jan. 6, 2009, the NWEA filed suit against NOAA and the EPA for, among other things: (1) not having the authority to conditionally approve Oregon's program and (2) failing to penalize Oregon for not developing an approved program by withholding funding under Section 306 of the Coastal Zone Management Act and Section 319 of the Clean Water Act. The CZMA is the enabling statute that encourages the protection, development, restoration, and enhancement of natural coastal resources, while the Coastal Zone Reauthorization Act reauthorizes the CZMA and adds a new requirement for states that have approved coastal-zone management programs to develop and implement coastal nonpoint control programs (CNPs).

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

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

Young Chevrolet, Inc. v. Texas Commission on Environmental Quality

Case Summary: *Young Chevrolet, Inc. v. TCEQ,* pertaining to the Voda Petroleum, Inc., State Superfund Site, was filed by potentially responsible parties (plaintiffs) to appeal an administrative order issued by the TCEQ pursuant to the Texas Superfund Law (THSC 361, subchapters F and I). Relative to issues relating to liability and apportionment decided by the supreme court in *Burlington Northern and Santa Fe Railway Co. v. United States* (556 U.S. 599 [2009]), the plaintiffs demanded that the TCEQ prove that the plaintiffs are liable for remediation and/or associated costs. The plaintiffs asserted the defense of no intent to dispose. The plaintiffs specifically denied liability for remedial actions or costs associated with specific areas of the superfund site and for certain materials disposed of at the site. The plaintiffs also denied responsibility for orphan shares. The plaintiffs contended that the wastes were divisible and sought apportionment and denied that they were jointly and severally liable.

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

State of Texas v. MOEX Offshore 2007, LLC

No. D-1-GV-12-000181; 353d Dist. Court, Travis County, Texas (filed Feb. 12, 2012)

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

Impact on the TCEQ: The MOEX settlement includes $3.25 million in federal Clean Water Act penalties to be spent in Texas on two federally administered supplemental environmental projects (SEP) as per the terms of the federal consent decree. The first project includes MOEX partnering with Friends of the River San Bernard to acquire and preserve contiguous wetland corridor and upland habitat along the San Bernard River in lower Fort Bend County through a conservation easement in perpetuity. The second project includes acquisition of Big Tree Ranch, which connects the Aransas National Wildlife Refuge and Goose Island State Park, protecting critical habitat for whooping cranes and neo-tropical migratory birds. Finally, the settlement includes $3.25 million in state civil penalties, resolving the state's claims under Texas Water Code 26.121(a) and Texas Natural Resources Code 40.251(c).

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

MDL No. 2179; U.S. Dist. Court, Eastern Dist. of Louisiana (77 cases combined into this one case on Aug. 10, 2010)

Case Summary: Seventy-seven cases related to the Deepwater Horizon oil spill were combined by the U.S. District Court in the Eastern District of Louisiana. A portion of the cases combined in this court include private causes of action for lost revenue resulting from the spill by fisherman and other local business owners. The United States and the states of Louisiana and Alabama have also filed causes of action for federal civil

penalties under the Clean Water Act and state civil penalties under applicable state laws. All of these cases have been combined into this one case. The State of Texas has declined to file causes of action in this case, but remains interested in the resolution of this matter as the court will be determining which parties are legally responsible for the spill and the appropriate liability percentage for each responsible party.

Impact on the TCEQ: Although the State of Texas is not a party to this case, the determinations this court makes as to responsible parties will likely affect other matters related to the Deepwater Horizon oil spill, including the Natural Resource Damage case (see below). On March 2, 2012, the judge issued an order stating that an agreement had been reached on the terms of a proposed class settlement with private plaintiffs and that the first phase of the trial, which was set to begin March 5, was adjourned indefinitely. On March 16, the judge issued an order stating that the terms of the settlement between BP and the private plaintiffs would be filed by April 16. The judge set up a May 3 conference with lawyers to address remaining issues, which include the claims of federal, state, and local governments against BP and other responsible parties. The order also provided that (as has been previously stated by the judge), as a result of the proposed class settlement, there may be a realignment of parties and a need to revise the existing trial plan.

Deepwater Horizon Natural Resource Damage Case

Case Summary: The TCEQ is one of three state agencies (along with the Texas Parks and Wildlife Department and the General Land Office) delegated by the governor to serve as a trustee in Natural Resource Damage matters for Texas. The Texas Natural Resource Trustees are currently working jointly with the Natural Resource Trustee representatives from the other four Gulf Coast states (Louisiana, Mississippi, Alabama, and Florida) as well as with the federal Natural Resource Trustee representatives from the National Oceanic and Atmospheric Administration and the Department of the Interior (collectively, the Trustees) in the Natural Resource Damage case related to the Deepwater Horizon oil spill. The Trustees are currently working cooperatively with BP in this Natural Resource Damage matter and therefore no suit has yet been filed against BP or any other responsible party for Natural Resource Damages.

Impact on the TCEQ: While there is not yet a filed lawsuit in this Natural Resource Damage case, the State of Texas, including the TCEQ (along with the other Gulf Coast states and federal Natural Resource Trustees) are preparing for litigation in this matter in the event the current cooperative climate between the Trustees and BP changes. While the Texas Natural Resource Trustees have not yet completed the assessment of damages to natural resources as a result of the Deepwater Horizon oil spill, the amount of damages to natural resources are potentially considerable. The Texas Trustees, including the TCEQ, may recover the determined amount of damages to natural resources and replace or restore the lost resources on behalf of the public in accordance with the Oil Pollution Act.

Aransas Project v. Bryan Shaw et al. In the U.S. Dist. Court, Southern Dist. of Texas, Corpus Christi Division

Civil Action No. C-2:10-cv-00075

Case Summary: On March 10, 2010, the Aransas Project (TAP) sued the TCEQ commissioners and executive director and the South Texas Watermaster for a "takings" under the federal Endangered Species Act because they allegedly failed to properly allocate water rights in the Guadalupe River Basin to guarantee sufficient freshwater inflows into San Antonio Bay during periods of drought. In part, TAP requests that the water rights in the basin be reallocated to help the whooping crane, or that a habitat conservation plan (HCP) be required. The Guadalupe Basin River Authority, the San Antonio River Authority, and the Texas Chemical Council intervened. The TCEQ responded that it had not caused a "taking" and asserted a number of affirmative defenses, including that the plaintiff's claims are barred by sovereign immunity and that the TCEQ has no authority to address the plaintiff's complaint of injury.

Trial was held in December 2011. The judge has indicated that she will not rule before the summer of 2012. Closing arguments and replies were filed in April and May, 2012.

Impact on the TCEQ: If the judge rules against the TCEQ, the significance of the impact will depend on the remedy the judge chooses. Although the judge has indicated that she does not intend to revise the Texas water-rights system, TAP is asking that existing water rights be curtailed for the whooping crane. This would change the water-right appropriation and management by the TCEQ. An HCP could be costly to the state.

City of Waco v. Texas Commission on Environmental Quality

Cause No. D-1-GV-08-000405 (filed March 3, 2008) and Cause No. D-1-GV-08-000667 (filed April 11, 2008)

Case Summary: Waco claims that waste from the O-Kee Dairy severely affects the quality of the water in Lake Waco, thereby damaging the city's public water supply and jeopardizing the health and welfare of its citizens who consume the water and engage in recreation in Lake Waco. The dairy is located in the North Bosque River watershed and is approximately 90 downstream miles from Waco's drinking-water intakes on Lake Waco.

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

Impact on the TCEQ: The outcome of this case could affect how the TCEQ determine who is an affected person under TWC, Ch. 5, and agency rules. Specifically, the TCEQ's interpretation and implementation of the requirements for an affected person for purposes of a contested-case hearing is being challenged. If the appellate court decision is allowed to stand, the TCEQ would be required to conduct an evidentiary hearing on the merits of whether an entity or person is an affected person if the requestor has submitted evidence, such as an affidavit, with his or her hearing request in support of his or her affected-person status. This would remove the agency's discretion to make a preliminary jurisdictional determination to refer a case to SOAH and would likely combine the analysis for an affected-person determination with the factual hearing on the merits.

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; and Barry Smitherman, Chairman of the Texas Public Utility Commission v. U.S. Environmental Protection Agency

In the U.S. Court of Appeals for the District of Columbia, Case No. 10-1041

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

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

Impact on the TCEQ: EPA actions have required states to conduct greenhouse gas (GHG) permitting. However, the TCEQ has informed the EPA that the TCEQ does not have the authority or intention of regulating GHGs. This has resulted in a SIP (state implementation plan) Call and a FIP (federal implementation plan) for the EPA to issue the permits. Therefore, the EPA is the permitting authority for GHGs in Texas, pending resolution of these challenges.

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

Case Summary: Texas is challenging the EPA's "Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs, Final Rule" (Johnson Memo or Timing Rule). Texas' Statement of Issues: (1) Whether pollutants for which there are no NAAQS can become "subject to regulation" for purposes of triggering permitting requirements under the PSD program; (2) Whether the PSD program is applicable to pollutants that are generally uniform in concentration throughout the atmosphere and defy area-specific effects; (3) Whether the act requires a SIP Call to accord states an appropriate process by which to conform their plans to the PSD Interpretive Rule; (4) Whether the act allows the regulation of an air pollutant under Title II to automatically trigger its regulation under the PSD program; (5) Whether it is arbitrary and capricious for the EPA to adopt an interpretation of the act that causes absurd results; (6) With respect to regulation of GHG from stationary sources, the EPA's interpretive rule exceeds its statutory authority or is arbitrary, capricious, or an abuse of EPA discretion by relying on the Endangerment Finding that (a) violates the act, the APA, EPA guidelines, and other applicable law; and (b) was improperly delegated responsibility to perform an endangerment analysis to a foreign entity, the IPCC among other organizations; and (7) Whether the interpretive rule together with the Endangerment Finding exceeds the limits of the supreme court's non-delegation precedents, violating the separation of powers principle under the U.S. Constitution.

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

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

Case Summary: Texas is challenging the EPA's Final Light-Duty Vehicle GHG Emission Standards and CAFE Standards (Tailpipe Rule). Statement of Issues: (1) Whether it is arbitrary and capricious for the EPA to promulgate the Tailpipe Rule without considering the economic impacts that result from the rule's triggering of the Prevention of Significant Deterioration ("PSD") program for greenhouse gases (GHGs); (2) Whether the EPA acts contrary to section

202(a)(2) of the CAA by allowing the Tailpipe Rule to take effect before GHG control technologies for PSD sources are developed and applied; (3) Whether it is arbitrary and capricious for the EPA to adopt a rule that causes absurd results; (4) Whether, with respect to the regulation of GHGs from stationary sources, the EPA's Tailpipe Rule exceeds the EPA's statutory authority or is arbitrary, capricious, or an abuse of the EPA's discretion by relying on the EPA's "Endangerment Finding" that violates CAA section 307(d), the Administrative Procedures Act, the "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information disseminated by EPA," and other applicable law; (5) Whether, with respect to regulation of GHGs from stationary sources, the EPA's Tailpipe Rule exceeds the EPA's statutory authority or is arbitrary, capricious, or an abuse of the EPA's discretion in violation of CAA section 307(d) by relying on the EPA's "Endangerment Finding" in which it improperly re-delegated its statutory responsibility to perform an endangerment analysis to a foreign entity, the Intergovernmental Panel on Climate Change (IPCC), among other organizations; and (6) Whether the EPA's Tailpipe Rule, together with CAA section 202(a), the EPA's "Endangerment Finding," and the EPA's "PSD Interpretive Rule," exceeds the limits of the supreme court's non-delegation precedents, violating the separation of powers principle under the U.S. Constitution.

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

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

In the U.S. Court of Appeals for the District of Columbia, Case No. 10-1222

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

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

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

In the U.S. Court of Appeals for the 5th Circuit, Case No. 10-60961

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

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

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

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

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

State of Texas; Rick Perry, Governor; Greg Abbott, Attorney General; Texas Commission on Environmental Quality; Texas Agriculture Commission; Texas Public Utility Commissioners Smitherman, Nelson, and Anderson; Texas Railroad Commission; and Texas General Land Office v. U.S. Environmental Protection Agency
In the U.S. Court of Appeals for the District of Columbia Circuit, Case No. 11-1128

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

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

Texas Oil and Gas Association et al. v. U.S. Environmental Protection Agency
In the U.S. Court of Appeals for the 5th Circuit, Case No. 10-60459

Case Summary: This challenges the EPA's final disapproval of the TCEQ's 1996 Qualified Facilities (QF) rules (and as readopted in 1998), which the EPA disapproved on April 14, 2010. The EPA disapproved the rules when it found that they do not meet the requirements of the Clean Air Act and the EPA's regulations, based on the following grounds: (1) the rules are unclear as to whether they are for a major or minor new source new-source-review (NSR) SIP revision; (2) the rules are not approvable as a substitute major NSR SIP revision; and (3) the rules are not approvable as a minor NSR SIP revision.

Impact on the TCEQ: The TCEQ has already amended the QF program rules and submitted them to the EPA as revisions to the SIP. Therefore, the impact of whether or not the court upholds the EPA's action regarding the disapproval of the original QF rules will be negligible in terms of the QF program. The impact of the decision will be the degree to which the court agrees or disagrees with the state's argument regarding the EPA's interpretation of state law,

because the QF program is a creature of state law. The opinion may influence the development of state-developed new-source-review permitting programs in the future. The disapproval has led to the EPA raising Title V objections to persons with QF permits.

State of Texas et al. v.
U.S. Environmental Protection Agency
In the United States Court of Appeals for the 5th Circuit, Case No. 10-60614

Case Summary: This challenges the EPA's final disapproval of the TCEQ's 1994 Flexible Permits (FP) rules (and some related later rulemakings), which the EPA disapproved on July 15, 2010. The EPA disapproved the rules when it found that the rules do not meet the requirements of the Clean Air Act and the EPA's regulations, based on the following grounds: (1) the rules are unclear as to whether they are for a major or minor new-source-review (NSR) SIP revision; (2) the rules are not approvable as a substitute major NSR SIP revision; (3) the rules are not approvable as a minor NSR SIP revision; and (4) the rules do not meet the NSR public-participation requirements.

Impact on the TCEQ: The TCEQ amended the FP program rules and is in the process of preparing additional documentation for submittal as revisions to the SIP. Therefore, the impact of whether the court upholds the EPA's action regarding the disapproval of the original FP rules will be negligible in terms of the FP program. The impact of the decision will be the degree to which the court agrees or disagrees with the state's argument regarding the EPA's interpretation of state law, because the FP program is a creature of state law. The opinion may influence the development of state-developed new-source-review permitting programs in the future. The disapproval has led to the EPA raising Title V objections to persons with flexible permits. The court issued an opinion on March 26, 2012, vacating the EPA's disapproval and remanding back to the EPA with instructions to reconsider the three TCEQ rules and "approve or disapprove them most expeditiously."

Luminant Generation Co., LLC, et al. v.
U.S. Environmental Protection Agency
In the U.S. Court of Appeals for the 5th Circuit, Case No. 10-60891

Case Summary: This challenges the EPA's final disapproval on Sept. 15, 2010, of the TCEQ's rules regarding changes adopted (a) in 2005 to implement the 1997 8-hour Ozone Standard adopted in 2005, and (b) in 2006 to implement the EPA's New Source Review (NSR) Reform Rules (which included changes to a Pollution Control Project Standard Permit [PCP SP] Rule). The EPA disapproved the rules when it found that they do not meet the requirements of the Clean Air Act and the EPA's regulations, based on the following grounds: (1) the plant-wide applicability limit (PAL) rules do not include text necessary for approval as a SIP revision, (2) certain other rules do not meet the requirements for approval as major NSR non-PAL SIP revision, and (3) the standard permit rule is not approvable as a minor NSR SIP revision. The focus of the state challenge is the EPA's disapproval of the Pollution Control Project Standard Permit.

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

Luminant Generation Co., LLC, et al. v.
U.S. Environmental Protection Agency
In the U.S. Court of Appeals for the 5th Circuit, Case No. 11-60158

Case Summary: Texas is challenging the EPA's final rule published in the *Federal Register* at 76 Fed. Reg. 1525 (Jan. 11, 2011) and titled "Approval and Promulgation of Air Quality Implementation Plans; Texas; Revisions to Rules and Regulations for Control of Air Pollution; Permitting of Grandfathered and Electing Electric Generating Facilities." The EPA approved all revisions of the Texas State Implementation Plan (SIP) submitted by the TCEQ on Jan. 3, 2000, and July 31, 2002, as supplemented on Aug. 5, 2009, except 30 TAC 116.911(a)(2), which allows use of a Pollution Control Project Standard Permit. These revisions are to regulations of the TCEQ that relate to application and permitting procedures for grandfathered electric generating facilities (EGFs), implementing Senate Bill 7 to achieve nitrogen oxide (NO_x), sulfur dioxide (SO_2), and particulate matter (PM) emission reductions from grandfathered EGFs.

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

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

In the U.S. Court of Appeals for the 5th Circuit, Case No. 10-60934

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

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

State of Texas and Texas Commission on Environmental Quality v. U.S. Environmental Protection Agency

In the U.S. Court of Appeals for the District of Columbia Circuit, Case no. 10-1259

Case Summary: Texas is challenging the EPA's final rule promulgating a new SO_2 NAAQS, and proposing designation and implementation requirements for states. Texas' arguments: (1) The EPA did not provide legally adequate notice and opportunity for comment on the form of the new Primary National Ambient Air Quality Standard (NAAQS) for Sulfur Dioxide (SO_2). (2) The EPA did not provide legally adequate notice and opportunity for comment on the requirement that dispersion modeling must be used to determine attainment with the Primary National Ambient Air Quality Standard (NAAQS) for Sulfur Dioxide (SO_2). (3) The EPA did not provide legally adequate notice and opportunity for comment on the requirement that all areas, whether designated as attainment, nonattainment, or unclassifiable, must submit maintenance plans to demonstrate maintenance and attainment of the NAAQS for SO_2. (4) The requirement that dispersion modeling must be used to determine attainment with the NAAQS for SO_2 is contrary to congressional intent.

Impact on the TCEQ: The new standard imposes significant new SIP requirements on most of the State of Texas that previously had not been subject to SIP actions, and has the potential to require significant reductions in SO_2 from point sources. The EPA guidance on modeling in most areas of the state will

require significant resources and time commitments on agency and staff.

State of Texas and Texas Commission on Environmental Quality v. U.S. Environmental Protection Agency

In the U.S. Court of Appeals for the District of Columbia Circuit, Case No. 10-1415

Case Summary: Texas is challenging the EPA's final rule of Prevention of Significant Deterioration (PSD) for Particulate Matter Less than 2.5 Micrometers ($PM_{2.5}$) – Increments, Significant Impact Levels (SILs), and Significant Monitoring Concentration (SMC). Texas' arguments: the EPA made substantial rule changes and interpretations in the final rule that were not properly noticed under the federal Administrative Procedures Act, and not a logical outgrowth of the proposed rule. The following changes complicate the modeling process and create unnecessary confusion for regulators and the regulated community: (1) Regulation of SILs using inconsistent definitions found in three different CFRs. (2) The EPA's conclusion that SILs are not mandatory. (3) The EPA's decision to include precursor emissions in the significant-impact-area determination by guidance and not through rulemaking at a future date. (4)Adoption of a new definition of "baseline area" for $PM_{2.5}$. (5) Adoption of a procedure for determining significant-impact area for $PM_{2.5}$ that differs significantly from the procedure used for PM_{10}. And (6) adoption of a lower SMC than proposed.

Impact on the TCEQ: The outcome of this litigation will require changes in how Texas evaluates PSD permit applications.

EME Homer City Generation, L.P. v. U.S. Environmental Protection Agency

In the U.S. Court of Appeals for the District of Columbia Circuit

Case Summary: Texas is challenging the EPA's Cross State Air Pollution Rule (CSAPR), which the EPA is using to replace CAIR, which was partially remanded, and partially vacated, by the D.C. Circuit. The rule is also being challenged by Texas electric generating utilities, including Luminant and San Miguel, and Pennsylvania's EME Homer City Generation LP. It is possible that other states, and other EGUs, will also be challenging this rule.

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

Impact on the TCEQ: The TCEQ is currently administering the trading provisions of the Clean Air Interstate Rule (CAIR), which was reinstated by the D.C. Circuit during the pendency of the stay of CSAPR. Should the court vacate the rule and require CAIR to remain in place while the EPA writes a new rule, the TCEQ would continue to administer CAIR. Should CSAPR be upheld by the court, Texas would be included in a FIP for transport for both $PM_{2.5}$ and ozone. The EPA would administer the trading programs under the FIP. If the rule is upheld as written, it is possible that it could lead to the shutdown of coal-fired power plants in Texas, with potential significant adverse impacts to the electric power grid.

Part III

Current Activities and Opportunities for Improvement

AIR QUALITY ISSUES *85*

WATER QUALITY AND QUANTITY ISSUES *103*

WASTE ISSUES *113*

OTHER KEY ISSUES *120*

Air Quality Issues

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

National Ambient Air Quality Standards (NAAQS)

Since the early 1970s, the EPA has promulgated six National Ambient Air Quality Standards (NAAQS). The NAAQS were established to protect the public from exposure to harmful amounts of the following air pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, respirable particulate matter, and sulfur dioxide. The EPA is required to review each criteria pollutant every five years to determine if the health-based standard is sufficient to protect public health. States are required by the CAA to develop and implement SIPs that assure attainment and maintenance of the NAAQS.

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

Revisions to the NAAQS

1997 Fine Particulate Matter ($PM_{2.5}$) Standard

The EPA is scheduled to complete its review of the fine particulate matter ($PM_{2.5}$) NAAQS in June 2012 and adopt in June 2013. In October 2011, the EPA indicated that it will retain the current particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM_{10}) standard, but may revise the current $PM_{2.5}$ standards.

According to the EPA's *Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards,* the EPA may consider reducing the annual primary $PM_{2.5}$ standard to a range of 11 to 13 $\mu g/m^3$, and retaining the current 24-hour primary $PM_{2.5}$ standard of 35 $\mu g/m^3$. Alternatively, the EPA may consider reducing the 24-hour primary $PM_{2.5}$ standard to 30 $\mu g/m^3$ in conjunction with an annual primary standard of 13 $\mu g/m^3$.

For the secondary standards for PM-related visibility impairment, the EPA may consider establishing a new indicator based on the use of speciated $PM_{2.5}$ mass and relative humidity to calculate $PM_{2.5}$ light extinction, and a one-hour averaging time in the range of 191 to 64 inverse megameters (Mm^{-1}) to target protection against visibility impairment related to fine particles. For the secondary standards for non-visibility welfare effects, the EPA concludes that there is insufficient information to assess the adequacy of protection afforded by the current standards.

2008 Lead Standard

On Oct. 15, 2008, the EPA lowered the NAAQS primary standard for lead from 1.5 to 0.15 micrograms of lead per cubic meter of ambient air. The secondary standard was revised to be identical in all respects to the primary standard.

On Nov. 22, 2010, the EPA published a final rule designating a portion of Collin County (approximately 2.5 square miles) surrounding the Exide Technologies facility, a lead-acid battery recycling facility, as nonattainment for the 2008 lead NAAQS. The effective date of the nonattainment designation was Dec. 31, 2010. The EPA's designation was identical to the revised recommendation the governor submitted to the EPA on Oct. 13, 2010. The revised recommendation took into account a permit alteration that reduces the permitted allowable emission rate contained in Exide's air permit. The TCEQ is in the process of finalizing the SIP revision to address this nonattainment area. Pending commission approval, the final adopted SIP revision should be sent to the EPA for their review by summer 2012.

2010 Primary Nitrogen Dioxide (NO_2) Standard

On Feb. 9, 2010, the EPA published the final rule to strengthen the primary nitrogen dioxide (NO_2) NAAQS. The rule establishes a new one-hour NO_2 standard at 100 parts per billion (ppb). The new standard focuses on short-term exposures to NO_2, which are generally greater on and near major roads. Currently, no area in Texas monitors above the 100 ppb standard. The EPA retained the current annual average NO_2 standard of 53 ppb, but changed the monitoring network requirements to capture both peak NO_2 concentrations that occur near roadways and community-wide NO_2 concentrations.

On Feb. 17, 2012, the EPA published the initial designations identifying all areas in the United States as unclassifiable/attainment. Two near-road NO_2 monitors in the Dallas–Fort Worth (DFW) and Houston-Galveston-Brazoria (HGB) areas must begin operating no later than Jan. 1, 2013. Two near-road NO_2 monitors in San Antonio and Austin–Round Rock must begin operating no later than Jan. 1, 2014. In 2016 or 2017, once the expanded network of NO_2 monitors is fully deployed and three years of air quality data have been collected, the EPA intends to redesignate areas based on data from the new monitoring network. The 2010 NO_2 NAAQS attainment date is January 2021 or 2022, approximately five years after the date of nonattainment designations.

2010 Sulfur Dioxide (SO_2) Primary Standard

The EPA strengthened the sulfur dioxide (SO_2) primary NAAQS on June 2, 2010, with a new one-hour standard, met when the 99th percentile daily maximum one-hour SO_2 concentration averaged over three years does not exceed 75 ppb. According to implementation guidance included in the preamble to the final NAAQS, new requirements include fully operational air quality monitors in 10 Texas locations by Jan. 1, 2013, and the use of refined AERMOD dispersion modeling to assess compliance for large SO_2 sources in areas designated as unclassifiable by June 2013.

On June 2, 2011, Texas recommended designations for the new NAAQS to the EPA. Because the 2010 regulatory design value for Jefferson County exceeded 75 ppb, nonattainment designation was recommended. Attainment designation was recommended for Dallas, Ellis, El Paso, Galveston, Gregg, Harris, Kaufman, McLennan, and Nueces counties; unclassifiable designation was recommended for all the remaining counties. Preliminary regulatory design values for 2011 (calculated with data from 2009 through 2011) indicated that all Texas counties, including Jefferson, are now in compliance with the 2010 SO_2 one-hour NAAQS. Certified 2011 Jefferson County SO_2 monitoring data were submitted to EPA Region 6 in a letter dated Feb. 10, 2012, to document that the area now meets the standard and to request the EPA's consideration of the latest certified data. This letter was followed by a revised recommendation from the governor on April 20, 2012, that Jefferson County be designated attainment.

On April 12, 2012, the EPA submitted a letter to states to update air agencies on the status of implementation of the SO_2 NAAQS. The letter states that the EPA is moving forward with the designation process as quickly as possible, focusing on areas with sufficient ambient air quality monitoring data and at

this time the EPA no longer expects states to submit modeling demonstrations of attainment by June 2013 for areas designated unclassifiable. The EPA expects that states will instead focus the SIP submittals due in June 2013 on "traditional infrastructure elements."

2008 Ozone Standard

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

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

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

The TCEQ submitted comments to the EPA on the proposed designations on Jan. 11, 2012. On Jan. 12, 2012, letters were sent to the judges, representatives, and senators for Hood, Wise, and Matagorda counties summarizing the DFW and HGB 2008 standard nonattainment designations, along with a copy of the TCEQ's response to the EPA.

Based on comprehensive technical analysis provided to the governor, he submitted a letter and technical analysis to the EPA on Feb. 29, 2012, opposing the expansion of the nonattainment areas because of a lack of scientific justification. On April 30, 2012, the EPA issued a final rule to establish classification thresholds, to establish December 31 of each relevant calendar year as the attainment date for each classification, and to revoke the 1997 eight-hour ozone NAAQS for purposes of transportation conformity. On May 1, 2012, the EPA notified states of final designations for the 2008 eight-hour ozone standard. The DFW area was designated "moderate" nonattainment and the HGB area was designated "marginal" nonattainment. Matagorda and Hood counties were designated attainment/unclassifiable. Wise County was designated nonattainment with a moderate classification and will be added to the DFW nonattainment area. The final rule is scheduled to go into effect 60 days after publication of the final rule in the *Federal Register*. The submittal deadline for attainment demonstration SIP revisions for the 2008 ozone standard is late spring or summer 2015.

On Feb. 14, 2012, the EPA published proposed thresholds for classifying nonattainment areas for the 2008 eight-hour ozone standard, proposed timing of attainment dates for each classification, and a proposal to revoke the 1997 eight-hour ozone standard one year after the effective date of designations for the 2008 eight-hour ozone standard for transportation conformity purposes.

2011 Carbon Monoxide (CO) Standard

On Aug.12, 2011, the EPA finalized the carbon monoxide (CO) NAAQS rule, which will retain the existing CO primary standards: an eight-hour standard of 9 ppm and a one-hour standard of 35 ppm. Some new near-road monitors are expected in Texas, but the EPA may allow states to relocate existing monitors to meet this requirement.

2012 NO_2 and SO_2 Secondary Standards

On March 20, 2012, the EPA finalized the retention of the current secondary NAAQS for NO_2 and SO_2. The existing NO_2 secondary standard is 53 ppb annual arithmetic average, calculated as the arithmetic mean of the one-hour NO_2 concentrations. The existing SO_2 secondary standard is a three-hour average of 0.5 ppm, not to be exceeded more than once per year. The focus of the standard is the protection of sensitive aquatic ecosystems caused by acidifying deposition of nitrogen and sulfur from the air.

SIP Revisions: Attainment, Progress, and Maintenance Demonstrations

Dallas–Fort Worth Area

The DFW 1997 eight-hour ozone standard nonattainment area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties) is currently classified as "serious" nonattainment area with an attainment date of June 15, 2013. The 2011 design value is 90 ppb. As of May 7, 2012, the preliminary ozone design value for 2012 is 83 ppb.

The governor recommended to the EPA in March 2009 that these nine counties and Hood County be designated as a nonattainment area for the 2008 eight-hour ozone standard. In a letter dated Oct. 31, 2011, the governor revised the March 2009 Texas recommendation to remove Hood County from the list because air quality monitoring data for 2008 through 2010 indicated that the area's design value was below the 2008 eight-hour ozone standard. The EPA sent a letter to the governor on Dec. 9, 2011, responding to the state's recommendations for area designation under the 2008 eight-hour ozone standard. In that letter, the EPA indicated that it intends to modify the state's recommended DFW nonattainment area designation to include Hood and Wise counties. On May 1, 2012, the EPA finalized its proposed designations and classifications for the 2008 eight-hour ozone standard. The DFW area was designated as a moderate nonattainment area. The counties included Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise. The EPA chose not to designate Hood County nonattainment.

Effective Jan. 19, 2011, the DFW 1997 eight-hour ozone nonattainment area was reclassified to serious with an attainment deadline of June 15, 2013. The commission adopted the reclassification attainment demonstration and reasonable further progress (RFP) SIP revisions on Dec. 7, 2011. The reclassification attainment demonstration SIP revision uses photochemical modeling in combination with a weight of evidence (WoE) evaluation to demonstrate that the DFW area is expected to attain the 1997 eight-hour ozone standard by the June 15, 2013, attainment deadline. All DFW regulatory monitors are projected to have 2012 eight-hour ozone design values below the level of the 1997 eight-hour ozone NAAQS. The WoE evaluation includes a corroborative analysis and additional control measures not explicitly accounted for in the photochemical modeling. The attainment demonstration SIP revision also includes CAA-required SIP elements, including a reasonably available control measures analysis, a motor vehicle emissions budget (MVEB), and a contingency plan. The reclassification RFP SIP revision includes an analysis of reasonable further progress toward attainment of the 1997 eight-hour ozone standard from the 2002 base year to the 2012 attainment year. The RFP SIP revision also includes revised base-year emissions inventories, updated RFP MVEBs for 2011 and 2012, and contingency demonstrations for 2011 and 2012.

Average temperatures in 2011 in the DFW area were some of the highest ever recorded there. In addition, extended periods of drought conditions and frequent periods of unusual meteorological conditions such as stagnant winds have contributed to an upward trend in ozone measurements for the year. The increase in values after several years of decline in ozone readings will make attaining the standard in 2012 very challenging.

Houston-Galveston-Brazoria Area

The HGB 1997 eight-hour ozone standard nonattainment area (Brazoria, Chambers, Fort Bend, Galveston,

Harris, Liberty, Montgomery, and Waller counties) is currently classified as severe with an attainment date as expeditious as possible, but no later than June 15, 2019. The 2011 design value is 89 ppb. As of May 7, the preliminary eight-hour ozone design value for 2012 is 83 ppb.

In March 2009, the governor recommended to the EPA that Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties be designated as a nonattainment area for the 2008 eight-hour ozone standard. In a letter dated Oct. 31, 2011, the governor reiterated the nonattainment recommendation for the HGB area. The EPA sent a letter to the governor on Dec. 9, 2011, responding to the state's recommendations for area designation under the 2008 eight-hour ozone standard. In that letter, the EPA indicated that they intended to modify the state's recommended HGB nonattainment area designation to include Matagorda County. On May 1, 2012, the EPA finalized classifications and designations for the 2008 eight-hour ozone standard. The HGB area was designated as a marginal nonattainment area. The counties included are Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. The EPA chose not to designate Matagorda County nonattainment.

On March 10, 2010, the commission adopted the HGB Attainment Demonstration SIP Revision and the HGB RFP SIP Revision for the 1997 eight-hour ozone standard. On Jan. 25, 2011, the EPA published a notice of its determination that the MVEBs in the March 10, 2010, SIP revisions are adequate for transportation conformity purposes (76 FR 4342).

On Dec. 7, 2011, the commission adopted the HGB Reasonably Available Control Technology (RACT) Analysis Update SIP Revision for the 1997 eight-hour ozone standard. This SIP revision provides an updated RACT analysis for volatile organic compound emission sources to include control techniques guidelines (CTG) that were not addressed in the March 2010 HGB Attainment Demonstration SIP Revision and incorporates CTG-related rule revisions.

On Feb. 1, 2012, the EPA published its proposed rule to determine that the HGB area did not attain the one-hour ozone NAAQS (0.12 ppm) by its attainment date of Nov. 15, 2007. Although the EPA revoked the one-hour standard on June 15, 2005, states must continue to meet two one-hour ozone anti-backsliding requirements. These requirements are triggered by a finding of failure to attain by the applicable attainment date. The requirements include contingency measures and the CAA, Section 185, major stationary source fee program. Reductions from contingency measures have already been achieved in HGB and a final determination of failure to attain would not trigger additional emission reductions. However, a final determination of failure to attain by the area's one-hour attainment date would trigger the one-hour anti-backsliding obligation to implement the penalty fee program under the CAA (182[d][3] and 185), unless that obligation is terminated.

Motor Vehicle Emissions Budget for the Houston-Galveston-Brazoria Nonattainment Area

An HGB MVEBs Update SIP Revision is scheduled for proposal on Oct. 3, 2012, with adoption in April 2013. This SIP revision would update the March 2010 HGB attainment demonstration and RFP SIP revisions to replace the on-road mobile source emissions inventories based on the EPA's MOBILE 6.2 model with those based on the EPA's Motor Vehicle Emission Simulator (MOVES) model and update the MVEBs to reflect this change. This SIP revision would also include technical analyses updating the corroborative analysis in the March 2010 attainment demonstration SIP revision adequate to support the modification of the HGB on-road MVEBs. The MOVES-based MVEBs established through this SIP revision are intended to facilitate transportation conformity in the HGB area. If an area's transportation plan does not conform to the budgets set for the area by the conformity deadline, then the plan enters into a one-year grace period followed by a conformity lapse. During a conformity lapse, no new projects or project phases may advance. Beginning March 2, 2013, transportation conformity must be conducted by local metropolitan planning organizations using the MOVES model.

MOVES-based estimated emissions determined for conformity would be directly comparable to MOVES-based MVEBs established through this SIP revision.

Beaumont–Port Arthur Area

Motor Vehicle Emissions Budget for the Beaumont–Port Arthur Nonattainment Area

A Beaumont–Port Arthur (BPA) MVEBs Update SIP Revision is scheduled for proposal on June 27, 2012, with adoption in December 2012. This SIP revision would update the BPA maintenance plan for the 1997 eight-hour ozone standard to replace the MOBILE 6.2-based on-road mobile source emissions inventories, which were included in the 2008 submittal, with those based on the MOVES model.

The MOVES-based MVEBs established through this SIP revision are intended to facilitate transportation conformity in the BPA area. If an area's transportation plan does not conform to the budgets set for the area by the conformity deadline, then the plan enters into a one-year grace period followed by a conformity lapse. During a conformity lapse, no new projects or project phases may advance. Beginning March 2, 2013, transportation conformity must be conducted by local metropolitan planning organizations using the MOVES model. MOVES-based estimated emissions determined for conformity would be directly comparable to MOVES-based MVEBs established through this SIP revision.

Other SIP Revisions

Collin County Attainment Demonstration SIP for the 2008 Lead Standard

Effective Dec. 31, 2010, the EPA designated a portion of Collin County surrounding the Exide Technologies lead-acid battery recycling facility as nonattainment for the 2008 lead NAAQS. On June 22, 2011, the commission approved the executive director's proposal for the Collin County Attainment Demonstration SIP Revision for the 2008 lead NAAQS. A public hearing on this proposal was held on July 28, 2011, in Frisco, Texas, with approximately 100 people attending. The Collin County Lead Attainment Demonstration SIP Revision is scheduled for adoption on May 30, 2012. Emission reduction strategies are included in an agreed order between the TCEQ and Exide. The agreed order provides the enforceable mechanism requiring operational changes and control technology strategies in order to demonstrate that the area will attain the standard by the attainment date. The SIP revision is due to the EPA by June 30, 2012, and the attainment date is Dec. 31, 2015.

Infrastructure and Transport SIP

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

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

Texas was issued a finding of failure to submit its infrastructure SIP revision for the 1997 eight-hour ozone NAAQS on March 27, 2008. The finding started a two-year FIP clock, but not a sanctions clock. The TCEQ submitted a letter on April 4, 2008, to the EPA to fulfill the state's infrastructure obligation for the 1997 eight-hour ozone and 1997 24-hour and annual $PM_{2.5}$ standards. On Oct. 22, 2008, the EPA published a finding of completeness for Texas' $PM_{2.5}$ submittal. The commission adopted a separate SIP revision for the 1997 ozone and $PM_{2.5}$ NAAQS to specifically address CAA transport provisions on April 16, 2008, and submitted this SIP revision to the EPA on May 1, 2008.

On Nov. 23, 2009, the TCEQ submitted a letter to fulfill the infrastructure requirements for the 2006 24-hour $PM_{2.5}$ standard, and it was deemed complete by operation of law on May 27, 2010. On April 5, 2011, the EPA proposed disapproval of the portion of Texas' infrastructure submission addressing the CAA transport requirements for the 2006 $PM_{2.5}$ NAAQS. In the disapproval notice, the EPA states that because CAIR was promulgated before the 2006 24-hour $PM_{2.5}$ NAAQS, and neither CAIR nor the state's CAIR program can be used to address transport with respect to that standard, they would not be able to approve the Texas submission because it relied on CAIR for emission reduction measures. The EPA also indicated that states will not be able to rely permanently on CAIR emissions reductions because CAIR will not remain in force permanently. If finalized, this disapproval would trigger the requirement that the EPA promulgate a FIP no later than two years from the date of disapproval. The finalized CSAPR may serve as the FIP that the EPA intends to implement for the state.

Due to legal challenges surrounding the CSAPR, the rule, scheduled to be effective Jan.1, 2012, was stayed. Key issues in the CSAPR rule include the lack of notice provided to Texas, the timeline for such significant reductions, reductions disproportionate with modeled impact, and lack of correlation with real-world facts, such as existing control strategies in place and current air quality measurements.

On Dec. 28, 2011, the EPA published a final rule to partially approve and partially disapprove the infrastructure submittals for 1997 eight-hour ozone and 1997 and 2006 $PM_{2.5}$. The EPA determined that the Texas SIP meets the CAA infrastructure requirements (110[a][2][A], [B], [E], [F], [G], [H], [K], [L], and [M], and portions of [C], [D][ii], and [J]), and also approved SIP revisions that modify the Prevention of Significant Deterioration (PSD) SIP to include NO_x as an ozone precursor. However, the EPA determined that the Texas SIP does not meet other CAA infrastructure requirements (portions of [C], [D][ii], and [J]), because Texas has stated it cannot issue permits for and does not intend to regulate greenhouse gas (GHG) emissions. The EPA also partially disapproved the Texas SIP revisions to address the PSD requirements (at 110[a][2][D][i]) because Texas cannot issue permits for emissions of GHGs. The EPA's March 27, 2008, finding of failure to submit started a two-year FIP clock. However, the EPA has already promulgated a FIP for the Texas PSD program to address permitting GHGs. The EPA will take action on the remaining transport elements in a separate rulemaking. Per consent decree, the visibility portion of 110(a)(2)(D)(i) must be acted on by Nov. 15, 2012.

On Aug. 17, 2011, the commission adopted the Lead Transport SIP Revision for the 2008 lead standard, and it was submitted to the EPA on Sept. 8, 2011. On Oct. 5, 2011, the commission adopted the infrastructure SIP revision for the 2008 lead standard, and it was submitted to the EPA on Oct. 13, 2011.

An infrastructure and transport SIP revision for the 2010 NO_2 standard is scheduled for proposal on June 27, 2012, and adoption in November 2012. An infrastructure and transport SIP revision for the 2008 ozone standard is scheduled for proposal on Aug. 22, 2012 and adoption in January 2013.

Regional Haze and Best Available Retrofit Technology (BART)

The TCEQ adopted a regional haze SIP on Feb. 25, 2009, and submitted it to the EPA. The deadline for federal Class I areas to achieve natural background

levels for visibility is 2064. SIP revisions for regional haze are required to be submitted to the EPA every five years until 2064.

Texas proposed its initial regional haze SIP in December 2007. The purpose of the regional haze SIP is to improve the worst 20 percent visibility days and cause no further degradation to the best 20 percent visibility days in identified federal Class I areas. Approximately 20 Class I areas were evaluated, including Big Bend and Guadalupe Mountains national parks in Texas, as well as other Class I areas in surrounding states. Modeling has identified haze pollutants in Texas as sulfur dioxide, nitrogen oxides, and particulate matter. Modeling indicates that the probable impact of Texas sources will be reduced due to the emissions reductions from existing controls. No additional controls were proposed with the Texas regional haze SIP.

The state was required to complete a best available retrofit technology (BART) analysis on older industrial units in 26 industrial categories. The EPA finalized implementation guidance for the BART portion of the regional haze SIP in July 2005 and set the threshold to 0.5 deciviews; sources modeling at or over the threshold of visibility impairing emissions were considered subject to BART.

The commission adopted the Texas BART Rule in January 2007, requiring BART-eligible sources to model emissions. Completion of an engineering analysis with possible controls was further required if modeling reported impairment over the threshold. Over 125 industrial sources were evaluated. Of the 125 sources, approximately 30 were required to perform individual modeling, which was reviewed extensively by the TCEQ. Ultimately, no sources were required to do additional BART controls due to reductions from EPA consent decrees, shutdowns, permit changes, and CAIR.

In January 2009, the EPA issued notice to 37 states (including Texas) of failure to timely submit acceptable regional haze SIPs, initiating two-year FIP clocks for those states, but the EPA mandated no associated sanctions. The EPA must propose action per the United States District Court for the District of Columbia, on the Texas regional haze SIP by May 30, 2012, and must make a final determination by Nov. 15, 2012. On Dec. 30, 2011, the EPA issued notice to Texas and other states that because their regional haze SIPs relied on CAIR to satisfy certain requirements, it was proposing a limited disapproval of the states' SIPs and a FIP to replace reliance on CAIR with reliance on CSAPR.

An update to the regional haze SIP submitted in 2009 is due to the EPA in 2014.

General Conformity SIP

The EPA revised its general conformity rule effective April 5, 2010. Pursuant to 40 CFR 51.851 and 93.151, in order to take full advantage of the revised rule, the state's general conformity SIP and associated rule (30 TAC 101.30) will have to be amended or repealed and approved by the EPA. The revised general conformity rule improves the process federal entities use to demonstrate that their actions will not contribute to a NAAQS violation, provides tools to encourage better communication and air quality planning between states and federal agencies, and encourages both the federal agencies and the states to take early actions to ensure projects will conform to the SIP. The intent of the federal general conformity requirement is to prevent the air quality impacts of federal actions from causing or contributing to a violation of the NAAQS or interfering with the purpose of the SIP. Once projects are submitted to the agency, the projects are reviewed to see if general conformity is applicable.

Transportation Conformity SIP

Transportation conformity is required by the federal Clean Air Act. The intent of the federal transportation conformity requirement is to prevent federally supported transportation plans, programs, and projects from causing or contributing to a violation of the NAAQS or interfering with the purpose of the SIP. The state's transportation conformity SIP and associated rule (30 TAC 114.260) spells out the Texas interagency consultation process, a key element of

the transportation conformity process. Transportation conformity applies to the Dallas–Fort Worth, Houston-Galveston-Brazoria, Beaumont–Port Arthur, and El Paso areas. On May 1, 2012, the EPA finalized its proposed designations and classifications for the 2008 eight-hour ozone standard. Wise County was added to the DFW nonattainment area. Transportation conformity will be required for Wise County within 12 months of the effective date of designation.

Inspection and Maintenance (I/M)

Pursuant to 40 Code of Federal Regulations (CFR) 51.372(b)(2), inspection and maintenance (I/M) SIP revisions are required for a new or revised NAAQS within one year after the effective date of designation and classification under the ozone NAAQS. The CAA requires I/M programs in moderate and above ozone nonattainment areas in any 1990 census-defined urbanized area with a population of 200,000 or more. Since Wise County has been included in an area classified as moderate for the 2008 ozone standard, an I/M SIP revision would be due May 2013 and an I/M program would have to be implemented in Wise County no later than May 2016. However, since Wise County is not part of the urbanized area, the agency may decline to require I/M in Wise County, provided that all requirements of the CAA are met. The agency will consider this issue when reviewing the required elements for the required SIP revision to address the 2008 ozone NAAQS.

I/M programs help improve air quality by identifying high-emitting vehicles in need of repair (through visual inspection, emissions testing, and/or the downloading of fault codes from a vehicle's onboard computer). Vehicles must be repaired as a prerequisite to issuance of the vehicle safety and emissions certificate. Currently, more than 8.5 million vehicles are inspected annually in the 17 counties of the DFW, HGB, ARR, and El Paso areas.

Stage II Vapor Recovery Program

The Stage II vapor recovery program is a requirement of the CAA that calls for the installation of technology to prevent gasoline vapors from escaping during the refueling of on-road motor vehicles in areas designated nonattainment with classifications that are moderate and above. Currently, the Stage II program is required in Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties in the Houston-Galveston-Brazoria area; Collin, Dallas, Denton, and Tarrant counties in the Dallas–Fort Worth area (DFW); El Paso County; and Hardin, Jefferson, and Orange counties in the Beaumont–Port Arthur area. The CAA provides for a waiver from Stage II requirements if certain criteria are met. These criteria include the determination that on-board refueling vapor recovery (ORVR) systems are in widespread use.

With DFW reclassified as a serious ozone nonattainment area on Jan. 19, 2011, and the 2008 ozone standard classifying an additional six counties (Ellis, Johnson, Kaufman, Parker, Rockwall, and Hood) as moderate, the DFW area may be required to meet the Stage II requirements, unless the EPA administrator determines that ORVR systems are in widespread use throughout the motor fleet as provided by CAA 202(a)(6). As required by CAA 182(b)(3) and 182(c), a state implementation plan (SIP) revision for Stage II vapor recovery is due to the EPA no later than two years after the effective date of the reclassification. The TCEQ Stage II SIP revision for the 1997 ozone standard is due to the EPA by Jan. 30, 2013, and the 2008 ozone standard is due in 2015.

On May 9, 2012, the EPA determined that the use of ORVR for capturing gasoline vapor when gasoline-powered vehicles are refueled is in widespread use throughout the highway motor vehicle fleet. The EPA determination provides a waiver for any nonattainment area classified after Jan. 1, 2011, as serious, severe, or extreme from implementing a Stage II program and also allows states to repeal Stage II in current program areas if the state can show that there is no backsliding. TCEQ staff is currently conducting an analysis using the EPA's Motor Vehicle Emissions Simulator (MOVES) model to identify any loss of credit.

1997 Eight-Hour Ozone Section 185 Fee for the Houston-Galveston-Brazoria Nonattainment Area

The HGB area is currently subject to CAA, Section 185, fee program requirements because the area was classified as severe for the one-hour ozone standard and did not attain that standard by the attainment date, Nov. 15, 2007.

The commission proposed a rule to initiate a Section 185 fee program in November 2009; however, an EPA guidance memo issued in January 2010 caused the commission to withdraw that rule. The guidance memo indicated that states could meet the one-hour ozone Section 185 fee obligation through a fee program or an equivalent alternative program, but it also stated that an area showing attainment of the stricter 1997 eight-hour ozone standard, based on permanent and enforceable reductions, would no longer be required to establish a fee program to satisfy the anti-backsliding requirements associated with transition from the one-hour standard to the eight-hour standard.

In place of the withdrawn proposal for a Section 185 fee program rule, the commission submitted a request for termination of the fee program for the HGB one-hour ozone nonattainment area based on 2010 data showing that the area was monitoring attainment of the 1997 eight-hour ozone standard. The EPA denied the request on July 25, 2011, based on preliminary 2011 data indicating that the HGB area was no longer monitoring attainment of the 1997 eight-hour ozone standard and because of a July 2011 D.C. Circuit Court of Appeals decision revoking the January 2010 EPA guidance memo. The commission is revising the withdrawn Section 185 fee program proposal for the HGB one-hour ozone nonattainment area and expects to re-propose the rule in mid-2012 and adopt in early 2013.

Because the HGB area is also classified as severe for the 1997 eight-hour ozone standard, a Section 185 fee program SIP revision is due to the EPA by June 15, 2014. The SIP revision would describe how the state will meet the CAA requirement for the Section 185 fee program if the HGB area fails to meet the 1997 eight-hour ozone standard by the end of 2018.

Texas Emissions Reduction Plan (TERP)

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

Diesel Emissions Reduction Incentive Grants Program

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

Through January 2012, a total of 9,037 projects had been funded. Those projects comprised 15,243 activities, and included pass-through grants awarded by the Railroad Commission of Texas, the Texas General Land Office, the North Central Texas Council of Governments, and the Houston-Galveston Area Council under third-party grant contracts from the TERP program. More than $906 million in grant funding has been awarded for replacements and upgrades to approximately 15,200 vehicles and pieces of equipment. These projects are expected to reduce NO_x emissions by more than 171,700 tons over the life of the projects. The next grant application period was expected to be opened in September 2012.

Texas Clean Fleet Program

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

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

The first grant round was administered in 2010, with eight projects awarded over $18 million in grant funds. Those projects included 232 vehicle replacement activities involving the purchase of natural-gas, propane, electric, and hybrid vehicles. These projects are expected to reduce NO_x emissions by more than 166 tons over the life of the projects. The grant application period opened in June 2012, with an allocation of $5.8 million for the fiscal biennium.

Alternative Fueling Facilities Program

In 2011, the 82nd Texas Legislature, Regular Session, enacted SB 385, establishing the Alternative Fueling Facilities Program (AFFP), to be administered by the TCEQ. The AFFP provides grant funding of the lesser of 50 percent of the costs or $500,000 for development of fueling facilities to provide alternative fuel in the state's nonattainment areas. Alternative fuels include natural gas, propane, biodiesel, hydrogen, electricity, and a fuel that contains at least 85 percent methanol by volume. The grant round opened in May 2012, with an allocation of $2.3 million for the fiscal biennium.

Clean Transportation Triangle Program

In 2011, the 82nd Texas Legislature, Regular Session, enacted SB 385, establishing the Clean Transportation Triangle (CTT) Program, to be administered by the TCEQ. The CTT provides grant funding for a portion of the cost of fueling facilities for compressed and liquefied natural gas within three miles of the interstate highways connecting the cities of Houston, Dallas, Fort Worth, and San Antonio. The first grant application period closed in April 2012, with 21 applications received. Up to $4.5 million of grant awards were expected to be made for this program for the fiscal biennium.

Texas Natural Gas Vehicle Grant Program

In 2011, the 82nd Texas Legislature, Regular Session, enacted SB 385, establishing the Texas Natural Gas Vehicle Grant Program (TNGVGP), to be administered by the TCEQ. The TNGVGP provides grant funding to cover 60 to 90 percent of the incremental cost of replacement or repower (engine replacement) of medium- and heavy-duty vehicles with natural-gas vehicles and engines. The grant recipient must commit to operate the grant-funded vehicle at least 75 percent of annual use in counties located in nonattainment areas and counties along the Clean Transportation Triangle, made up of the interstate highways connecting the cities of Houston, Dallas, Fort Worth, and San Antonio. The first grant application period opened in June 2012, with an allocation of $18.3 million for the fiscal biennium.

New Technology Implementation Grants Program

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

- Advanced clean energy projects (ACEP) for new or modified sources.
- New technology projects that reduce emissions of regulated pollutants from point

sources and involve capital expenditures that exceed $500 million.
- Electricity storage projects related to renewable energy.

The first grant round was administered in 2010, with two projects awarded over $6 million in grant funds. The two projects involve systems to capture and store energy generated from wind, including a compressed air energy storage system and a combined compressed air and thermal energy storage system.

Air Toxics

The TCEQ's extensive air-monitoring program provides information about the ambient levels of pollutants known as air toxics. Air toxics, also known as hazardous air pollutants, are pollutants that are known or suspected to cause cancer or other serious health effects. Texas currently has the ability to monitor for approximately 120 air toxics, including volatile organic compounds (VOCs), carbonyls, and metals. In 2011, the TCEQ reviewed air toxics data from 80 stationary monitoring sites, which lead to almost 7 million data points. In addition, the TCEQ also reviews ambient air data collected by its field and mobile monitoring projects.

The TCEQ compares monitoring data to air-monitoring comparison values (AMCVs) and air quality standards to determine if the air quality poses a risk to human or vegetative health, or could cause odors. To improve the evaluation of these air toxics data, in 2006, the TCEQ revised the process for deriving AMCVs. That process was peer reviewed by international experts in the field of human health risk assessment and incorporated the best scientific methods available. In 2010, the TCEQ began to update that process again, to take into account the latest scientific methods and the development of oral toxicity factors. This updated process was also peer reviewed by international experts in the field of human health risk assessment in 2011, and as of April 2012, is undergoing a second round of public comments. It is anticipated that this updated process will be finalized and in use by the end of 2012.

As of April 2012, AMCVs have been derived for 56 air toxics using the current process. Importantly, the AMCVs for some of these air toxics have also undergone independent, external peer review by subject experts and all the AMCVs have undergone public comment, which allows the development process to remain transparent and provides members of the general public, advocacy groups, industry, and academia the chance to be involved. These peer and public reviews provide the TCEQ and the public with a high level of confidence in the safety and integrity of the AMCVs and the methods for developing them. In fact, the evaluations of some of these air toxics, including 1,3-butadiene and chromium, have received recognition from other state and federal agencies and professionals in the scientific community as being the most appropriate values available.

Additionally, the EPA has recently developed a draft toxicity value for formaldehyde that, if adopted and implemented, would mean that background levels in ambient air around the world and in indoor air would be unacceptably high. Even more implausible, using the EPA's draft formaldehyde number would mean that the formaldehyde levels naturally found in human breath would be unacceptably high. The EPA derived this value despite clear scientific evidence that it is too conservative. The TCEQ developed its own formaldehyde toxicity value that is reasonable, yet still health protective. In fiscal years 2013–2017, the TCEQ plans to finalize approximately 24 new chemical assessments.

Using the most up-to-date information available, less than 2 percent of the state's monitors indicated a potential health or welfare concern by the end of 2010 (the last full year's worth of data evaluated). Notably, in TCEQ Region 12, Houston, all air toxics measured in 2010 were below their respective long-term AMCV for the first time in many years. If long-term monitored concentrations of pollutants are above the long-term AMCV or if there are frequent exceedances of the short-term AMCV, the TCEQ puts the pollutant and the area of potential sources of the pollutant on the Air Pollutant Watch List (APWL).

The TCEQ established the APWL to address the areas of the state where air toxics were monitored at a level of a potential concern. The purpose of the APWL is to reduce ambient air toxic concentrations below levels of concern by focusing TCEQ resources and heightening awareness for interested parties in areas of concern. The Texas Legislature, during the 82nd Regular Session, affirmed the TCEQ's obligation to regulate air toxic emissions with the passing of House Bill 1981, which requires the TCEQ to establish and maintain the APWL.

The TCEQ has taken several steps to improve the consistency and transparency of the APWL program. In February 2012, the TCEQ finalized the APWL protocol to clearly define the APWL process and build on its successes in implementing the APWL program. The protocol specifies all processes involved in the APWL from initial observations of ambient air monitoring data to the removal of an area from the APWL that has been successfully remediated. The protocol specifies that the APWL process includes notification to affected legislators and procedures for public comment. The APWL process also includes an enhanced communication component, which includes identifying and contacting specific entities and persons to engage and inform affected stakeholders. The TCEQ also strives to improve communications by holding public meetings, as appropriate, and by issuing periodic reports on the APWL.

The TCEQ has used the APWL program to successfully reduce ambient air toxic concentrations. The TCEQ finalized four removals from the APWL in 2010 and one removal in 2012. Currently, there are ten active APWL areas in nine counties. Monitored concentrations in several active APWL areas have shown significant improvement, and the TCEQ continues to monitor and evaluate these areas to determine whether or not the improvements in ambient air quality are expected to be maintained and to determine if those areas can potentially be removed from the APWL. The TCEQ continues to work with companies in the ten active APWL areas to encourage emission reductions and develop strategies to improve the air quality in their areas.

The APWL, however, is not the only way that the TCEQ addresses air quality concerns. The TCEQ has been involved with numerous scientific studies investigating human exposure to airborne toxic chemicals and the potential of these exposures to cause adverse health effects. For example, studies have been completed in Houston (addressing Houstonians' personal exposure to VOCs from both indoor and outdoor sources) and Midlothian (addressing citizen concern about possible exposure to metals from cement-kiln operations). These studies have been critically important: they have not only led to a greater understanding of air pollution and more knowledgeable decision making by the TCEQ, but they have also become an invaluable way to address community concerns, since many of these studies were originally requested by citizens. Similar residential exposure studies will continue into the fiscal years 2013–2017 time frame, as funds are available.

The TCEQ has continued to expend extensive efforts in evaluating air quality in the hydrocarbon-producing geological formation of the Dallas–Fort Worth area known as the Barnett Shale; these efforts will continue into the fiscal years 2013–2017 time frame. Health-effects evaluations of air-monitoring data collected during regional reconnaissance and citizen complaint investigations are still being conducted to determine the potential for adverse health and welfare effects in this region. Several new stationary VOC monitors have been installed in the region and more will be installed in the near future. Air-monitoring data collected from these monitors will be evaluated from a perspective of effects on health and welfare.

Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP), Also Known as AirCheck Texas Drive a Clean Machine (DACM) Program

In 2001, the 77th Texas Legislature, Regular Session, passed HB 2134 to assist low-income individuals with repairs, retrofits, or retirement of vehicles that failed

emissions inspections. The TCEQ implemented the legislation by adopting requirements establishing income eligibility requirements at 200 percent of the federal poverty level and providing up to $600 in assistance for emissions-related repairs or $1,000 toward replacement assistance of a vehicle that failed the required emissions test.

In 2007, the 80th Texas Legislature, Regular Session, adopted SB 12, and in 2011, the 82nd Texas Legislature, Regular Session, adopted HB 3272, making changes that enhanced the vehicle retirement option of the program. Eligibility requirements for vehicle retirement include: must be gasoline-powered and at least 10 years old or have failed an emissions inspection within the last 30 days, must have been operated and registered in a participating county for at least 12 of the last 15 months preceding the application, and must have passed the Texas Department of Public Safety safety inspection or safety and emissions inspection within 15 months of the application. Also, its owner must meet certain income criteria (up to 300 percent of federal poverty level).

Under the AirCheck Texas DACM program, an eligible applicant may receive a voucher for up to $3,500 for the purchase of an eligible replacement vehicle or up to $600 for emissions-related repairs on vehicles that fail an emissions inspection. The new vehicle must meet federal Tier 2 Bin 5, or cleaner, emissions standards; have a gross vehicle weight rating of less than 10,000 pounds; have an odometer reading of not more than 70,000 miles; and have a total purchase cost that does not exceed $35,000 for gasoline vehicles and $45,000 for hybrid, electric, natural-gas, and Tier 2 Bin 3 or cleaner vehicles.

For the 2008 through 2009 and 2010 through 2011 biennia, the Texas Legislature appropriated $45 million for each fiscal year to fund the program. For the 2012–13 biennia, the Texas Legislature reduced appropriations to $5,625,000 for each fiscal year.

In 2011, the 82nd Legislature amended the LIRAP guidelines. Specifically, they were amended to include definitions for electric and natural-gas vehicles and modify the current definitions of hybrid motor vehicle and replacement vehicle. The length of time a vehicle must be registered in a LIRAP-participating county was revised to require registration for at least 12 of the 15 months preceding the application for assistance. A requirement that eligible replacement vehicles have an odometer reading of no more than 70,000 miles was also added. Additionally the Legislature increased the cost limitation from $25,000 to $35,000 and $45,000 for hybrid, electric, or natural-gas vehicles or a vehicle certified as Tier 2 Bin 3 or cleaner. The Legislature also revised the amount of replacement assistance to provide $3,500 for a replacement hybrid, electric, natural-gas, and federal Tier 2 Bin 3 or cleaner vehicle of the current model year or the previous three model years.

The DACM program is administered through grant contracts with participating counties that can contract with another entity to administer the program. Participation in the program is voluntary for counties participating in the I/M program. In the nine-county Dallas–Fort Worth area, the program is administered by the North Central Texas Council of Governments. In the five-county Houston-Galveston-Brazoria area, the program is administered by the Houston-Galveston Area Council. Travis and Williamson counties each administer their own program.

From Dec. 12, 2007, through Feb. 29, 2012 (end of 2nd quarter, fiscal 2012), 49,676 vehicles were retired and 22,746 vehicles were repaired through the DACM program.

Tax Relief for Pollution Control Property Program

The Tax Relief for Pollution Control Property program was created in 1993 by the passage of HB 1920, which created Section 11.31 of the Texas Tax Code. Chapter 277 of Title 30 of the Texas Administrative Code was adopted to establish the procedures and mechanisms for obtaining a use determination. The administrative rules were subsequently moved to Chapter 17. The TCEQ is responsible for determining whether a facility uses certain property, in whole or in part, for pollution control. Receiving a property

tax exemption for pollution-control property is a two-step process.

- A facility must receive a positive-use determination from the TCEQ indicating that the property is used either wholly or partly for pollution control.
- The company then submits a copy of its positive-use determination along with its exemption request to its local appraisal district. The amount of the exemption is based on the appraisal district's valuation of the property and the local tax rate.

"Property" includes both real and personal, and can consist of devices, equipments, methods, or lands that are used for pollution control, i.e., to prevent, monitor, control, or reduce air, water, or land pollution.

The program's season for application review runs from January through June of each year. As of April 30, 2012, the program has approximately 223 applications under active review. For the 2011 calendar year, the program processed 610 applications. Positive-use determinations were issued for 495 applications, with a total listed estimated cost of $1,371,210,642 (107 applications were withdrawn).

Federal Greenhouse Gas Regulations

The Texas attorney general has six pending lawsuits challenging the EPA's greenhouse gas (GHG) regulations. All six lawsuits are progressing through the federal appellate court system. The first four, which relate to the EPA's GHG regulations, have been briefed, and oral arguments held on Feb. 28 and 29, 2012. The remaining two involve the SIP (State Implementation Plan) Call and the Federal Implementation Plan (FIP) and are currently on a briefing schedule. The TCEQ expects rulings on the first four cases by the end of 2012. While the lawsuits are pending, the EPA imposed a FIP in Texas to issue Prevention of Significant Deterioration (PSD) permits to new or modified major sources that emit GHGs at levels significantly higher than the major source trigger established under the federal Clean Air Act (CAA). The TCEQ continues to be the permitting authority for non-GHG pollutants under Texas law and the SIP.

On Feb. 24, 2012, the EPA proposed to keep GHG permitting thresholds at levels established under the 2010 Tailoring Rule, instead of lowering them (Step 3 of the Tailoring Rule). After evaluating the progress of GHG permitting so far, the EPA believes that state permitting authorities have not had sufficient time to develop necessary program infrastructure, and to increase their GHG permitting expertise, to make it administratively feasible to apply PSD and Title V permitting requirements to smaller sources.

It is the TCEQ's position that Steps 1 and 2 of the EPA's Tailoring Rule are not consistent with the purposes of air quality planning and major stationary source permitting requirements of the CAA; violate statutory thresholds established under the act; and significantly raise the cost of implementing PSD and Title V programs without meaningful reductions of GHGs on a worldwide level. The TCEQ agrees with the EPA's conclusion in the Step 3 proposal that any reduction of the Step 1 and 2 applicability thresholds would not result in significant additional reductions of GHGs, and would only increase the burden on regulated entities and permitting authorities. The TCEQ is also encouraged that the EPA is supporting the types of streamlined permitting processes that the TCEQ has implemented for years, namely plant-wide applicability limits, minor new source review (NSR) potential to emit (PTE) limitations, and standard permits.

On April 13, 2012, the EPA published *New Source Performance Standards (NSPS) for GHG Emissions from Fossil-Fueled Electric Utility Generating Units*. The proposed standard would set first-ever CO_2 emission limits for new power plants. Among other requirements, new coal or petroleum coke power plants would need to incorporate carbon capture and storage technology (CCS) in order to meet the rule. The EPA claims that there is no benefit or cost impact from the proposed rule because there will be no construction of new coal-fired power plants without CCS by 2030 based on the EPA's projections and information from the Energy Information Administration. The TCEQ will be commenting on this proposed NSPS.

Federal and State Changes to Texas Air Permitting

During the period 1994–1999, the TCEQ submitted rules regarding the flexible permit and qualified-facilities permitting programs, and updates to rules regarding public participation. Since that time, the TCEQ had been awaiting the EPA's final review and approval or disapproval. In 2008 and 2009, the EPA issued four notices citing specific concerns with how Texas issues certain air permits under these three rulemakings, as well as the TCEQ's 2006 adoption of the EPA's new source review (NSR) reform rules, which became final in 2002. Although the EPA withdrew its proposed action on the public-participation rules, it disapproved the other rules in 2010. The TCEQ has been working with the EPA to resolve the perceived issues as discussed herein.

Public Participation

These rules concern the manner in which the TCEQ notifies the public about certain NSR permit applications and who in the public can request a hearing. The TCEQ submitted these rules to the EPA for review in October 1999. The response from the EPA came in November 2008. The EPA asserts that there is insufficient notice of draft permit for minor NSR permits and that the rules are missing specific notice requirements for major NSR permits. On June 2, 2010, the TCEQ adopted new rules to address the concerns and the TCEQ submitted the rules to the EPA as a SIP revision on July 2, 2010, and this resulted in the EPA withdrawing its proposed limited approval/limited disapproval on Nov. 5, 2011. The EPA was required to take final action to approve or disapprove these rules by January 2012. EPA Region 6 staff has indicated that a proposal notice may be issued in summer 2012.

Qualified Facilities

These rules implement SB 1126, 74th Legislative Session (1995). They allow certain changes (at well-controlled facilities) as long as there is no net increase in allowable emissions at the site, and no new facilities are constructed. The TCEQ submitted these rules to the EPA for review in March 1996. The official response from the EPA came in September 2009. The EPA disapproved these rules on April 14, 2010, primarily because facilities are allowed to make modifications without formal review or notice. The TCEQ addressed this and other concerns through rule changes and these revised rules were adopted on Sept. 15, 2010. The TCEQ submitted these revised rules to the EPA on Oct. 5, 2010, and the EPA had until April 2012 to approve or disapprove the rules. EPA staff has indicated that review of these rules will begin after the EPA proposes action on the public-participation rules (discussed above).

Flexible Permits

This type of air authorization allows a cap for emission limits for a group of facilities at a site rather than emission limits for individual pieces of equipment. Flexible-permit holders have the ability to over-control some equipment while not adding additional controls to other equipment, as long as the total emissions remain under and comply with the cap. The TCEQ submitted these rules to the EPA for review in November 1994. The EPA proposed disapproval in September 2009, and took final action to disapprove the rules in September 2010. The EPA's concerns include practical enforceability, insufficient opportunity for public participation, and not conducting federal NSR applicability review. Despite the fact that it was clear that the EPA was not looking for revised flexible-permit rules, but rather a different, SIP-approved permit (30 TAC, Subchapter B), the TCEQ addressed EPA concerns by adopting revised rules for flexible permits on Dec. 14, 2010.

The EPA sent letters to all flexible-permit holders in September 2010, requiring each recipient to "confer" with the EPA on a plan to transition their flexible permit to a SIP-approved permit or be subject to EPA enforcement action. The EPA eventually received a response from all the flexible-permit holders, and each response included varying plans of action to "de-flex." As of April 2012, the TCEQ has received more than

100 applications to transition a flexible permit to a SIP-approved permit.

New Source Review Reform

New source review (NSR) reform rules were adopted in response to EPA rule changes. The TCEQ submitted these rules, and rules implementing the 8 hour ozone standard, to the EPA for review in June 2005 and February 2006. In September 2009, the EPA responded with the concerns that included anti-backsliding, plant-wide applicability limits, and references to federal rules, and formally disapproved these rules in September 2010. The TCEQ adopted rules to address these concerns on March 3, 2011. However, the EPA later identified additional issues that needed to be addressed. The resulting, third round of rules has been a collaborative effort between the TCEQ and the EPA and were proposed on Feb. 22, 2012. The anticipated adoption date is July 25, 2012, and this should be adequate information for the EPA to approve all of these rules as a revision to the Texas SIP.

Pollution Control Project Standard Permit

An amended Pollution Control Project Standard Permit (PCP SP) rule and a new non-rule PCP SP were adopted in response to the EPA's disapproval of rules submitted in 2006. The EPA disapproved the rules on the ground that the standard permit rule is not approvable as a minor NSR SIP revision. The PCP SP disapproval was the focus of the successful state challenge to the disapproval.

Resolving the EPA's Objections to Title V Permits

In 2009, the EPA began objecting to approximately 30 of Texas' Title V permits in order to force the TCEQ and permit holders to revise the permits to remove flexible permits and qualified-facilities changes; modify the use of incorporation by reference (IBR) of NSR permits, and correct several other perceived flaws. Under Title V rules, the objections must be resolved before the affected Title V permits can be issued. The most challenging and unresolved Title V objections include IBR of Flexible Permits, PSD permits and Qualified Facilities. While the TCEQ has received notification from the EPA regarding the resolution of some specific permit objections, the EPA has not made any final determinations regarding the objections generally. Companies with remaining objections may face additional permitting delays resulting from the significant time and effort it takes the TCEQ to negotiate a reasonable solution to the objections.

Air-Emission Authorizations for Oil and Gas Sites

The massive growth and technology advancement in the oil and gas industry continues to result in substantial workload increases for the TCEQ's Air Permits Division (APD). In the last five years, the APD has seen a sharp increase in the number of air authorizations resulting from the growth of the industry. In 2011, the APD completed approximately 3,000 authorizations, which is a noticeable difference from the 1,100 authorizations in 2006. Based on the number of applications processed in the first four months of 2012, the workload for oil and gas authorizations is on track to remain at 2011 levels, with the potential for a 50 percent increase due to the extensive outreach conducted over the last two years. Additionally, new federal regulations expected to be finalized this year set standards for oil and gas not previously addressed. This may result in additional workload increases for the APD as oil and gas shale play activity continues. Workforce planning tools include process-streamlining, all-electronic correspondence, and technology updates to allow for a more automated review, such as e-Permitting.

Air Quality Monitoring

The TCEQ continues to deploy air quality monitoring equipment in order to meet EPA and SIP requirements.

GasFindIR Camera

GasFindIR camera technology offers a unique technological advancement in pollution detection capability and has proved to be highly effective in the detection of volatile organic compound (VOC) emissions. The

camera is a handheld remote sensing device based on infrared thermographic principles, with the special capability of making hydrocarbon emissions visible under certain ambient conditions.

The TCEQ was one of the first state agencies in the country to use GasFindIR camera technology to monitor air quality. With the knowledge gained from the use of the camera, the TCEQ has improved emissions inventories and is enhancing regulations to address these emissions, focusing efforts on real air quality solutions with real results. This technology has proved to be highly effective in the detection of VOC emissions from leaks and previously unidentified or unrecognized sources, and has resulted in the reduction of VOC emissions by thousands of tons.

The TCEQ currently owns eleven GasFindIR cameras, which serve as screening tools to assist the agency in activities such as facility investigations, reconnaissance investigations, mobile monitoring, and special projects.

Below is a brief outline of how the GasFindIR is used by the TCEQ:

Surveillance Using TCEQ Cameras

- Screen to identify potential sources of contaminants in response to ambient or other monitoring results that indicate elevated concentrations.
- Screen to identify sites, or areas within a specific site, where a focused investigation may be conducted.
- Screen to identify potential sources of complaints.
- Screen areas to identify potential sampling or monitoring locations (mobile or fixed).
- Screen areas to identify possible safety concerns and minimize exposure to VOCs.
- Coordinate with the TCEQ's Small Business and Environmental Assistance Division for possible pollution prevention site assistance visits.

Contracting with Third-Party Vendor

- Identify the potential for source control strategies or to assist in an assessment of existing strategies.
- Screen potential sources for SIP or rule considerations.
- Screen sources for emissions inventory issues.

The GasFindIR cameras are also used to augment and bolster existing compliance investigations at facilities required to control VOC emissions.

By incorporating the GasFindIR camera into monitoring activities over the past six and a half years, the TCEQ has significantly enhanced its capabilities in the field, leading to many successes. This includes various collaborative efforts between the TCEQ and the regulated community with contracted camera services (e.g., flyovers, "find and fix" programs, and the identification of undocumented large-scale emissions from upstream oil and gas facilities). Some additional examples of successes from activities that have employed agency cameras are: the Hurricane Ike response, numerous regional office mobile and area monitoring projects (including Barnett and Eagle Ford Shale oil and gas operations), and the 2010 Flare Task Force study.

Rules addressing uses of the camera as a supplemental leak detection tool and other incentives for the regulated community have also been adopted.

Expansion of the Monitoring Network Due to Changing Air Quality Standards

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

- Ozone monitoring in urban areas based on population and measured ozone concentrations in each area. Under the current standard, two additional monitors will be required; however, the final amount will vary depending on the EPA's ozone reevaluation, scheduled for 2013.
- Lead monitoring at airports and other sources that emit between 0.5 and 1.0 tons per year. New monitors could be installed in up to nine

locations, depending on results from source-based emission reporting.

- Carbon monoxide and nitrogen dioxide monitoring near peak traffic areas in Austin, Dallas–Ft. Worth, El Paso, Houston, San Antonio, and South Texas. Based on current monitoring requirements, up to eight new nitrogen dioxide monitors and four new carbon monoxide monitors may be installed in these areas.
- Sulfur dioxide monitoring in populous areas and near emission sources. As many as four new sulfur dioxide monitors could be installed around the state, depending on results from source-based emission reporting.

Overall, these new requirements are expected to result in between 20 and 30 new monitoring locations and approximately 30 new monitoring instruments around the state by 2018.

Clean School Bus Program

The 79th Texas Legislature passed HB 3469, which authorized the TCEQ to establish and administer a program designed to improve the health of school children and bus drivers by reducing emissions of diesel exhaust from school buses. To meet these goals, the Legislature authorized the TCEQ to provide grants to Texas schools. The Texas Clean School Bus Program, established under Chapter 390, Texas Health and Safety Code, was first funded through the General Appropriations Act, enacted by the 80th Texas Legislature for the 2008–09 biennium.

Reimbursements from the Texas Emissions Reduction Plan funding was $11,866,956 for fiscal 2008–2009 and $1,268,149 for fiscal 2010–2011. Fiscal 2012 and 2013 state appropriations from the Texas Emissions Reduction Plan funds are $4,479,204. Additional funds of $3,697,749 for school buses have been reimbursed from federal grant programs between 2008 and 2011.

As of June 2012, the Clean School Bus Program has reimbursed $17,113,970 in funding to 175 school districts for upgrades that reduce emissions of harmful particulate matter (PM) on 6,544 school buses.

Water Quality and Quantity Issues

The Office of Water was created in December 2009 to address one of the most significant agency challenges at that time–the loss of specific water staff expertise. Our goal in establishing the office was to bring together many of TCEQ's water programs in order to maximize the availability of knowledgeable staff in the area of water resources and to provide enhanced representation for high-profile water policy issues. The Office of Water includes agency functions related to permitting, planning, supply, and availability.

Water Availability

Drought

Large sections of the state experienced exceptional drought in 2009. From our actions and lessons learned, we were better prepared to manage the exceptional drought conditions that the state again experienced from December 2010 and continuing into 2012. As a point of reference, in April 2009, 70 counties or portions of counties were under extreme or exceptional drought conditions. In October 2011, all 254 counties in the state were experiencing drought, most in the exceptional drought category.

Water Rights and Senior Calls

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

As drought conditions persisted throughout 2011, the TCEQ received 15 senior calls on surface water from municipal, industrial, irrigation, and domestic

and livestock users in the Brazos, Guadalupe, Colorado, Sabine, and Neches river basins. All total, these senior calls resulted in the suspension or curtailment of over 1,200 water-right permits and the TCEQ stopped issuing temporary water-right permits. Senior calls were rescinded and suspensions were lifted as drought conditions improved, providing junior water-right holders the opportunity to use and store water provided by rains.

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

Commission Outreach

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

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

- Mail-out of notification letters alerting water-right holders of possible (or actual) curtailments or suspensions resulting from drought.
- Consultation with public water systems and monitoring of their implementation of drought contingency plans.
- Coordination of media responses and press releases to address specific drought impacts and to promote water conservation.
- Coordination of emergency technical assistance in alleviating water crises by temporarily providing bulk water during drought-related water system outages.
- On-site investigations to ensure compliance with water-right suspensions.
- Participation with other state agencies on the Joint Information Center and Drought Preparedness Council.

Public Water Systems

The TCEQ conducted a number of additional outreach and assistance activities specifically targeting public water systems–in an effort to do all we could to prevent systems from running out of water.

- The TCEQ serves as a member of the TDEM's Emergency Drinking Water Task Force and Drought Preparedness Council, working with other state agencies to provide state-level emergency assistance. As an example, state agency partners developed the Emergency Drinking Water Annex, a document that details management and response for public water systems with 180 days or less of water supply.
- The TCEQ sponsored Drought Workshops at eight locations across Texas, focusing on resources available to public water systems in managing drought. The workshops are attended by state agency partners from the TDEM, the Texas Department of Agriculture, and the Texas Water Development Board.

- The TCEQ strongly encouraged all public water systems to provide regular status updates, allowing the TCEQ to offer assistance to those experiencing critical conditions.
- The TCEQ intensively monitors a targeted list of public water systems that have either limited or an unknown supply of water remaining. The TCEQ offered these systems financial, managerial, and technical assistance that includes identification of alternative water sources, coordination of emergency drinking water planning, and identification of possible funding sources for alternative sources of water.
- The TCEQ coordinated with numerous funding agencies to assist drought-stricken public water systems in obtaining a new or improved source of water.
- The TCEQ contacted all public water suppliers in Texas, strongly encouraging implementation of drought contingency plans.

New Issues and Actions

Because of the exceptional and prolonged nature of the drought we experienced beginning in December 2010, there were several new issues that TCEQ worked through:

- The Governor's Drought Proclamation suspended all rules and regulations that may inhibit or prevent prompt response. The proclamation allowed the TCEQ to streamline permitting and use-enforcement discretion.
- The TCEQ had never managed senior municipal or domestic and livestock calls in non-watermaster areas.
- The TCEQ had never worked with power plants in managing lake levels and temperatures.
- Suspended water rights did not include junior municipal or power generation uses because of concerns about public health and safety. The TCEQ required increased stages of drought contingency plans in senior call areas.
- The TCEQ worked with the U.S. Army Corps of Engineers to coordinate releases from Lake Whitney.

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

Curtailment Rulemaking

TCEQ's Sunset bill (HB 2694) amended the Texas Water Code to state that the executive director may temporarily suspend or adjust rights during times of drought or emergency shortage of water. On April 11, 2012, the TCEQ adopted rules that define drought or other emergency shortage of water and specify conditions and terms under which the executive director may exercise authority. The TCEQ is currently initiating a stakeholder process to determine how these rules will be implemented if or when the state is again threatened by drought or other water shortages.

TCEQ Watermaster Programs

The TCEQ has three Watermaster programs:

- The Rio Grande, which serves the Rio Grande River Basin and coordinates releases from the Amistad and Falcon reservoir system.
- The South Texas, which serves the Nueces, San Antonio, and Guadalupe river basins, as well as the adjacent coastal basins.
- The Concho River, which serves a portion of the Concho River segment of the Colorado River Basin.

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

issues become severe. Since watermaster staff are located in regional or field offices, they are able to closely coordinate with water-right holders.

Watermaster Programs in Drought

TCEQ watermaster offices provide important agency resources during drought conditions. The Watermaster programs ensure compliance with water rights by monitoring stream flows, reservoir levels, and water use, and coordinating diversions in the basins under their jurisdictions.

With the exception of the Rio Grande Watermaster Program (RGWM), watermasters have the authority to allocate available surface water in accordance with the priority doctrine that states "first in time, first in right." Water rights under the RGWM jurisdiction are prioritized by type of use, with municipal use having the highest priority. With detailed knowledge of water-right permits in relation to each other, watermasters are equipped to negotiate surface water use to minimize negative impacts to all water-right holders they serve. The ability to directly manage available surface water on a daily basis reduces the potential for curtailments of non-municipal uses in the Rio Grande and for curtailments resulting from a priority call under the priority doctrine in the two other watermaster areas. The authority provided to a watermaster by the Texas Water Code allows them to manage the dynamic surface water resources in a way that protects senior and superior rights, while balancing the needs of all water-right holders.

In the areas of the state outside the jurisdiction of a watermaster program, the TCEQ is still responsible for the protection of senior and superior water rights. Agency actions in these areas are more reactionary than those that are in a watermaster program. Without the dedicated staff of a watermaster program, the TCEQ must shift field resources during critical drought periods in order to respond effectively to drought impacts. From the summer of 2009 through 2012, the TCEQ executive director temporarily realigned agency resources by establishing a dedicated group of TCEQ regional investigators specifically trained to provide immediate response to water-right complaints and to conduct compliance investigations as a result of the drought.

Should drought conditions continue in areas outside a watermaster program, the TCEQ will again reallocate resources to protect surface water rights. Protecting surface water rights is a critical issue in the State of Texas and, as a result, the TCEQ continues to monitor drought conditions statewide on a weekly basis.

Watermaster Program Evaluations

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

The 2012 evaluation will encompass the Brazos and Colorado basins, including the Brazos-Colorado and Colorado-Lavaca coastal basins. Other river basins will be evaluated as follows:

Year 2 (2013)
Trinity River Basin
Trinity-San Jacinto Coastal Basin
San Jacinto River Basin
San Jacinto-Brazos Coastal Basin

Year 3 (2014)
Sabine River Basin
Neches River Basin
Neches-Trinity Coastal Basin

Year 4 (2015)
Canadian River Basin
Red River Basin

Year 5 (2016)
Sulphur River Basin
Cures Creek River Basin

International Treaties and River Compacts and Associated Impacts on Water Availability for Texas

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

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

Environmental Flows

SB 3 (80th Legislative Session) created the current process for establishing environmental flows. An environmental flow is an amount of water to leave in a stream or river for the benefit of the environment of the river and bay and estuary, while balancing human needs. The bill established the Environmental Flows Advisory Group to oversee implementation. To assist the advisory group with the implementation of certain provisions, the bill established an Environmental Flows Science Advisory Committee, which in part serves as an objective scientific body to advise and make recommendations to the advisory group on issues relating to the science of environmental flow protection and develop recommendations for direction, coordination, and consistency for the advisory group, the local bay and basin groups, and the TCEQ. The bill requires the TCEQ to adopt recommendations in the form of environmental flow standards to be used in the decision-making process for new (and amended) water-right applications.

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

The TCEQ adopted rules for the first set of basins in April 2011. Rules for the last set of basins identified in the statute are currently scheduled for adoption by Sept. 1, 2013.

Groundwater Protection and Management

State Groundwater Protection Strategy

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

While there are no statutory mandates for how often the strategy must be updated, the 2003 strategy did set forth the goal of reviewing and updating the strategy every six years. The 2003 strategy has been under review by the TGPC since 2009. The TCEQ will be responsible for preparing and supporting efforts to implement this document.

Priority Groundwater Management Areas

The TCEQ is also responsible for delineating and designating priority groundwater management areas (PGMAs) and creating groundwater conservation districts (GCDs) in response to landowner petitions or through the PGMA process. The 82nd Legislature made changes to the PGMA program and new PGMA studies will be undertaken over the next several years to determine if any of the areas of the state without GCDs have or will have critical groundwater problems in the next 50-year planning cycle. The TCEQ has adopted new rules to implement the 2011 statutory changes, taken actions to add one PGMA to an existing GCD, and is currently tracking and pursuing GCD creation in the other PGMAs. The TCEQ and the Texas Water Development Board (TWDB) will prepare and submit to the 83rd Texas Legislature a report on the creation of new GCDs, the status and result of actions in the PGMAs, GCD management planning, and agency- required interactions.

Groundwater Management

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

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

A GCD management plan and the "desired future conditions" for a groundwater management area (GMA) are dynamic and must be readopted and approved at least once every five years. The state's GCDs have completed the first round of the GMA planning process to adopt desired future conditions for their groundwater resources. The TWDB has provided the estimates of "modeled available groundwater" to the GCDs for inclusion in their next management plan and to the regional water planning groups for inclusion in their 2016 plans. The 82nd Legislature continued the current law for the first round of GMA planning but made significant changes to the GMA process for the next cycle of joint planning regarding GCD responsibilities, petitions for inquiry to the TCEQ, and appeals of desired future conditions to the TWDB. The TCEQ actively monitors and ensures GCD compliance to meet management-plan adoption and re-adoption requirements. The TCEQ also takes action when the state auditor determines that a GCD is not operational in achieving the objectives of its management plan, and responds to petitions for inquiry of a GCD. The TCEQ rules that govern these responsibilities were updated in fiscal 2012 to implement the statutory changes of the 82nd Legislature.

Public Water Supply Supervision Program Implementation

The TCEQ retains primary enforcement authority (primacy) for the federal Safe Drinking Water Act (SDWA) by implementing the Public Water Supply Supervision (PWSS) Program. A key objective of the PWSS Program is to ensure that customers of public water systems are provided with water that meets the health-based drinking water quality standards, and that the public has complete access to information that the TCEQ gathers under the SDWA.

The TCEQ is developing accessible data-sharing tools that will allow customers of public water systems to see chemical and microbial sampling results for their system over the Internet. The TCEQ is also working on a data portal that will allow systems to submit monitoring reports electronically. The TCEQ is assisting public water systems to comply with ever-increasing National Primary Drinking Water Regulations

that target protection from viral contamination of wells under the Ground Water Rule, protection from Cryptosporidium (a pathogen) in surface water under the Long Term 2 Enhanced Surface Water Treatment Rule, and carcinogenic disinfection byproducts under the Stage 2 Disinfectants and Disinfection Byproducts Rule. The TCEQ is providing guidance and templates to help systems understand these complex rules. As the EPA makes new rules for lead, copper, and coliform bacteria, the TCEQ will remain involved in the federal rulemaking process.

Water Quality Management

Water quality management includes the development of water quality standards, monitoring, assessment, permitting, and restoration activities. Water quality planning programs in Texas recognize the need for keeping the state's water resources safe for drinking, swimming, fishing, aquatic life, and other beneficial uses. It is a complex effort that requires collaboration among numerous parties. The large geographic expanse of the state, increasing demands on the state's water resources, changing federal policies, and new technical issues require that state water quality planning programs evolve to meet new challenges.

The water quality planning programs in the Water Quality Planning Division are responding to these challenges by developing new approaches to addressing water quality issues in the state. Watershed Action Planning (WAP) is an approach that integrates priorities while emphasizing the role of partners and stakeholders at the basin and watershed levels. It relies on sound technical information and coordinated internal and external planning to make available multiple options that provide the flexibility needed to address varied conditions. The WAP process provides for planning, coordinating, and tracking actions taken to execute a watershed management strategy.

An output of the WAP process is a list of impaired and special-interest water bodies, identifying a recommended approach to addressing the water quality issues. A Web-based tool will be developed to document and track activities and successes. The ultimate goal of the WAP process is to achieve restoration of designated uses in impaired water bodies.

Water Quality Standards and Implementation Procedures

Revisions to the Texas Surface Water Quality Standards

The Texas Surface Water Quality Standards (30 Texas Administrative Code (TAC) 307) are the foundation for managing surface water quality by establishing water quality goals for the streams, rivers, reservoirs, and bays of Texas. The standards provide the basis for:

- Setting treatment levels for permitted wastewater discharges.
- Evaluating monitoring data to determine if water quality is being maintained.
- Establishing water quality targets to set total maximum daily loads of pollutants.

The TCEQ adopted revisions to the Surface Water Quality Standards on June 30, 2010. These included numerical nutrient criteria for 75 reservoirs, numerous site-specific standards based on use-attainability analyses, revised toxic criteria, and expanded categories of recreational uses and corresponding criteria. The TCEQ will continue to develop water quality goals for the state, conduct triennial reviews of water quality standards, and revise as needed.

The TCEQ plans to publicly revise the water quality standards approximately every three years to:

- Incorporate better information on the effects of potential pollutants.
- Improve standards for specific water bodies based on new studies.
- Address changes in state and federal requirements.
- Improve the framework for water quality management.

The TCEQ is developing additional site-specific and statewide criteria for the protection of aquatic life and human health during the next revision of the water quality standards, tentatively scheduled for 2013. The TCEQ will also update its Nutrient Criteria Development Plan during this revision cycle.

The TCEQ has established sampling plans, identified appropriate water bodies, established a public-participation process, and allocated future resources to coordinate, conduct, and review numerous site-specific standards based on use-attainability analyses. This process will improve the standards and water quality targets, and the results will be incorporated into the next revision of the water quality standards.

Revisions to the Procedures to Implement the Texas Surface Water Quality Standards

"Revisions to Procedures to Implement the Texas Surface Water Quality Standards" were approved by the commissioners on June 30, 2010. The revised implementation procedures must be approved by the EPA in order for them to be used by the TCEQ for wastewater permitting. On Dec. 2, 2010, the EPA denied approval of the 2010 implementation procedures, due to concerns with whole effluent toxicity and de-chlorination requirements. The TCEQ then further revised the implementation procedures, with stakeholder input, to address the EPA's concerns. The commission approved the proposal for the new implementation procedures at the Jan. 11, 2012, Commissioners' Agenda meeting. The proposal was placed on public notice and the public-comment period ended on Feb. 27, 2012. The EPA recently provided comment on the revised document. Responses to public and EPA comments will be prepared by agency staff. If document revisions are approved by the commission, the final version will be submitted to the EPA for review and approval prior to use.

Coordinated Monitoring Network

The TCEQ directs a surface water quality monitoring network involving approximately 1,800 monitoring sites in the state's streams, rivers, reservoirs, bays and estuaries. The sampling is conducted by TCEQ regional staff, Clean Rivers Program partners, and other local organizations. Monitoring groups meet annually to plan and develop a comprehensive monitoring program that supports the various statewide and basin objectives. The comprehensive management program ensures adequate coverage to support water quality management activities. Key activities for future planning include: gathering more knowledge of local environmental factors to better define water quality issues; leveraging the resources and expertise of more water monitoring programs to help maximize limited resources; identifying long-term monitoring sites for analyzing trends; and participating in the Watershed Action Planning process for developing various water quality strategies.

Continuous Water Quality Monitoring

The TCEQ has developed a Continuous Water Quality Monitoring Network (CWQMN) to measure water quality with greater temporal resolution than is possible with the routine monitoring network. The TCEQ deploys CWQMN sites where there are data needs that can be met with continuous monitoring using available technology. CWQMN data can be appropriate for a variety of uses involving the characterization of baseline conditions, water resource management decisions, water quality trends, Total Maximum Daily Load implementation, public information, etc. The network includes approximately 70 sites in fiscal 2012. Annual reviews of CWQM sites include evaluations of:

- data needs
- available monitoring technology
- available funding
- availability of operators
- site constraints

Sites may be added, deleted, or modified during each of the next five years. The TCEQ will also review existing procedures, practices, and instrumentation to improve data quality and data return from CWQMN sites.

Integrated Report

The Integrated Report (also known as the Texas Water Quality Inventory and 303(d) List) summarizes the data collection activities of the agency and partner entities. This water quality report is submitted to the Environmental Protection Agency (EPA) in even-numbered years, as required by the Clean Water Act

(CWA). Its purpose is to provide information on the condition of surface water quality throughout Texas as compared to the Texas Surface Water Quality Standards.

The report identifies specific water bodies in need of remedial activities that may necessitate the development of a TMDL or watershed protection plan, changes to wastewater permits, or revisions to water quality standards. This information is also used to direct sampling resources and identify data needs for future assessments. Recent reports have been developed using advanced technological tools for receiving, compiling, analyzing, and reporting data. These tools will be further developed over the next five years to increase efficiencies and improve the overall process. The next report is scheduled to be submitted in 2012, with subsequent reports scheduled for submission in 2014 and 2016.

Addressing Water Quality Impairments

The Integrated Report is the tool the agency uses to identify impairments. Once identified, the agency has four primary approaches that may be taken to address an impaired water body:

- use-attainability analysis
- special studies
- Watershed Protection Plans (WPPs)
- Total Maximum Daily Loads (TMDLs)

Work conducted under each of these approaches may be done by several entities. The TCEQ is the lead agency for point-source pollution and nonagricultural nonpoint-source pollution. The Texas State Soil and Water Conservation Board (TSSWCB) is the lead agency for nonpoint-source pollution resulting from agricultural and forestry operations. Frequent coordination occurs between the TSSWCB and the TCEQ programs to identify projects, coordinate resources, and avoid duplication of effort.

Use-Attainability Analysis

A use-attainability analysis (UAA) is a scientific assessment of the physical, chemical, and biological characteristics of a water body. It is conducted to determine existing and attainable uses. UAAs are often used to re-evaluate designated or presumed uses when the existing standards appear to be inappropriate for water bodies that are listed as impaired. UAAs may be conducted by the TCEQ's Water Quality Planning Division. The TSSWCB conducts UAAs primarily in areas affected by agriculture and silviculture.

Special Studies

Special studies can encompass a variety of projects that may be used to address impaired waters. These are typically conducted to gather additional information regarding the cause of a water body impairment in an area where unique or complex factors exist.

Watershed Protection Plans (WPP)

WPPs are plans used to protect and/or restore water bodies by characterizing pollution sources, establishing water quality–based pollution-control targets, and identifying the programs and practices that will be used to achieve the targets. WPPs are conducted through the Nonpoint Source (NPS) Program, which in Texas is administered by both the TCEQ and TSSWCB. The TCEQ and TSSWCB provide NPS 319(h) grants to local stakeholder groups for the development of the WPPs. While the TCEQ and TSSWCB administer the program, the WPP document may be developed by a variety of local groups, such as river authorities, councils of governments, or stakeholder groups.

Total Maximum Daily Loads

Where current control actions or pollution prevention strategies are not sufficient to attain water quality standards, the state takes action to restore some impaired segments through the Total Maximum Daily Load (TMDL) Program. A TMDL determines the maximum amount of a pollutant that a water body can receive and still maintain its identified uses. A TMDL allocates the load to regulated and unregulated sources in the watershed. TMDLs are conducted by the TMDL Program in the Water Quality Planning Division. An Implementation Plan (I-Plan) is developed for each TMDL to identify the management measures

necessary to achieve the allocation goals identified in the TMDL. Stakeholder involvement is essential in the development of both the TMDL and the I-Plan.

Coordination of Water Quality Studies

Staff of the TCEQ and other local, regional, state, and federal agencies coordinate closely and plan the water quality sampling studies of each agency, in order to efficiently address multiple sampling goals, avoid duplication of efforts, and share information. We will continue to notify and seek input from external stakeholders regarding TCEQ water quality studies, in order to increase public awareness and to obtain local information on the characteristics of individual water bodies.

Bacteria Listings

Elevated bacteria concentrations that exceed the contact recreation standards continue to be the dominant water quality issue affecting water bodies. Newly identified bacteria-impaired water bodies may require a recreational use attainability analysis to establish the appropriate use under the most recently approved water quality standards. TCEQ programs will work together to complete these studies. Bacteria TMDLs have been conducted or completed in most urban areas of the state. Over the next five years, many new bacteria impairments in urban areas will be within existing TMDL watersheds. The TMDL Program will add these new impaired segments to existing TMDLs through updates to the State Water Quality Management Plan.

Nonpoint Source Program

Congress enacted Section 319 of the federal Clean Water Act (CWA) in 1987, establishing a national program to control nonpoint sources of water pollution. Section 319(h) sets forth the guidelines for state nonpoint source (NPS) pollution control requirements. Since 1990, Congress has annually appropriated grant funds to states under 319(h) to help implement NPS pollution management programs.

The Texas Nonpoint Source (NPS) Program implements Section 319 of the CWA. The state NPS Program is a shared responsibility between the TCEQ and the Texas State Soil and Water Conservation Board (TSSWCB). The TSSWCB is the lead agency in the state for addressing NPS pollution resulting from agricultural and silvicultural activities. The TCEQ NPS program is the lead for addressing other categories of NPS pollution, including urban runoff. The two agencies coordinate their program responsibilities through formal agreements, the preparation of statewide program documents, the development of watershed-specific plans, and routine interagency meetings and correspondence.

Coastal Activities

The Coastal Nonpoint Source Pollution Control Program was established by the U.S. Congress in 1990 and is jointly administered by the National Oceanic and Atmospheric Administration and the EPA. The program establishes a set of management measures for states to use in controlling polluted runoff. The measures are designed to control runoff from six main sources: (1) forestry, (2) agriculture, (3) urban areas, (4) marinas, (5) hydromodification (shoreline and stream channel modification), and (6) wetlands and vegetated shorelines, or riparian areas.

In July 2003, the State of Texas was granted conditional approval of its Texas Coastal Nonpoint Source Pollution Control Program. This program is actively working with the General Land Office to address the remaining "outstanding conditions" in order to gain full approval of the program.

The Galveston Bay Estuary Program (GBEP) and the Coastal Bend Bays and Estuaries Program (CBBEP) were created under Section 320 of the CWA to develop and implement comprehensive conservation management plans for their regions. These management plans, the Galveston Bay Plan and the Coastal Bend Bays Plan, were developed by stakeholders and approved in 1995 and 1998, respectively. The plans are being implemented in accordance with Texas Water Code, Subchapter N, sections 5.601–5.609. To provide flexibility to stakeholders, the plans are implemented through two different approaches. GBEP is managed by TCEQ staff. CBBEP is managed by a nonprofit

entity established for that purpose and funded partially under a contract with the TCEQ.

Waste Issues

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

Dry Cleaner Remediation Program

The Dry Cleaner Remediation Program (DCRP) uses state contractors to clean up the sites. There are currently four assessment contractors and three engineering contractors being used to address the sites in the program.

The Texas Legislature established the Dry Cleaning Facility Release Fund in 2003 to regulate and remediate certain dry-cleaning facilities and provide the funding for implementation of the program. The program collects registration and solvent fees from solvent distributors, dry cleaner facilities, drop stations, current property owners, and previous property owners. These fees are used to administer the registration of facilities and to clean up sites. The fund expires Sept. 1, 2021.

To be eligible for the DCRP, an applicant must be registered with the TCEQ and be one of the following: (1) the owner of the dry cleaner facility or drop station; (2) the property owner where the facility or drop station is (or was) located; or (3) the previous property owner with an agreement with the current property owner establishing responsibility for costs associated with the cleanup of contamination. Applicants must submit an application for site ranking that documents a release of dry cleaner solvent into the environment from a currently registered or former retail dry cleaner facility. The applicant must pay the first $5,000 of the corrective-action costs incurred as a non-refundable deductible, and sign an affidavit stating that perchloroethylene will not be used at the site. Once corrective action has begun, perchloroethylene can no longer be used at that site. A deed notice prohibiting any future use of perchloroethylene at the site is required and must be filed in the county property records.

Since the program began in 2003, there have been 230 applications received (as of April 1, 2012). To date, cleanup has been completed at 46 sites. There are 169 sites in the program (68 active and 101 postponed). An average of one new application is received each month.

For fiscal 2012, the appropriated budget for the DCRP was approximately $3.2 million. The level of funding has affected new site assessments and actions at active sites. In fiscal 2012, cleanup activities had to be postponed at 59 percent of the sites.

Petroleum Storage Tank (PST) Program

The TCEQ oversees the assessment and cleanup of leaking petroleum storage tank (LPST) sites. Cleanups are conducted either through the Responsible Party (RP) Lead Program or through the State Lead Program. Under the State Lead Program, the TCEQ conducts the cleanups using state contractors in situations where the owner or operator cannot be found or is unwilling or unable to pursue cleanup, pursuant to Texas Water Code (TWC) 26.351, or in situations in which a site transferred to State Lead at the end of the PST Reimbursement Program, pursuant to TWC 26.3573(r-1).

The Texas Legislature established the Petroleum Storage Tank Remediation (PSTR) account in 1989, to help thousands of tank owners and operators pay for the cleanups of releases from PSTs. The fund is supported by a fee collected on the bulk delivery of fuel. To be eligible for reimbursement, releases had to be reported by Dec. 22, 1998. For releases reported after this date, cleanups are paid for by the tank owner or operator's environmental liability insurance, their own funds, or other financial assurance mechanisms. To date, over $1 billion has been paid out in reimbursements from the PSTR account.

The PSTR account is also the primary funding source for cleanups conducted by the state. Another source of funding for cleanups conducted by the state is a federal grant that requires a 10 percent state match.

The bulk fee and the PST Reimbursement Program were statutorily scheduled for sunset several times in the past; however, the sunset date was extended each time. In 2007, the 80th Legislature passed HB 3554, which continued the bulk delivery fee until Aug. 31, 2011; eliminated the tank registration fee, which supported the regulatory components of the PST program; and extended the PST reimbursement program for four years. Eligible parties that did not complete all corrective action by the Aug. 31, 2011, deadline were able to apply to have their site placed in the PST State Lead Program by July 1, 2011. Responsible Parties (RPs) for more than 400 reimbursement-eligible sites requested to have their sites placed in the State Lead Program by the July 1, 2011, deadline. The reimbursement program will expire on Sept. 1, 2012.

The TCEQ Sunset legislation, HB 2694, 82nd Legislature, continued the petroleum product delivery fee, although this time the TCEQ was required to make the change by establishing the amount of the fee in rule. Through rulemaking, the TCEQ set the fee in an amount not to exceed the amount necessary to cover the agency's costs of administering the program. The fee was decreased by approximately 27 percent. The comptroller's rules still contain details regarding the fee, and the comptroller collects the fee.

Since the program began, in 1987, there have been 26,280 reported releases (as of March 2012). Of those, cleanup has been completed at 24,561 sites, and corrective action is under way at 1,719 sites. Most of these cleanups have been paid for through the PSTR fund. In addition, an average of 20 new releases are reported each month. New reported releases become part of the reimbursement-ineligible inventory of sites.

The State Lead Program is responsible for the cleanup activities at approximately 650 sites, including the eligible sites placed in the program, and the sites that cannot be addressed by a viable RP.

Adequate funding will be necessary to meet the ongoing requirements of the PST State Lead Program and to continue the PST regulatory program, which helps ensure the prevention of future releases.

Low-Level Radioactive Waste

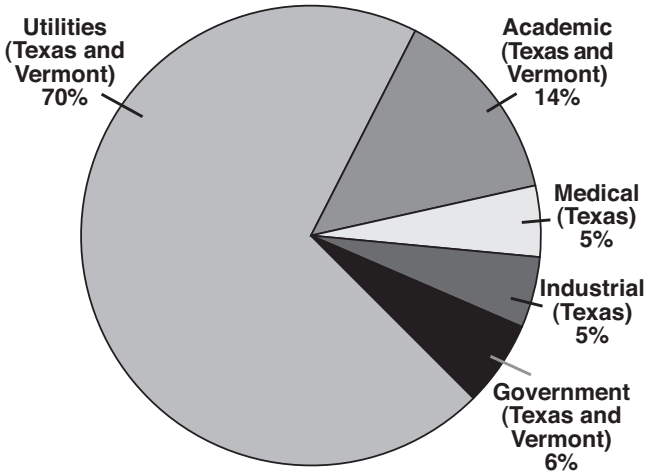
The objective of the Radioactive Materials Program is to protect the public and workers from unnecessary radiation exposure and to protect the environment from contamination resulting from the possession, storage, or disposal of radioactive materials. Major activities performed under the Radioactive Materials Program are regulation, compliance and enforcement, and licensing of facilities storing, processing, or disposing of low-level radioactive waste.

Texas Health and Safety Code, Chapter 401, provides regulatory jurisdiction and facility ownership and custodial responsibilities to the TCEQ for commercial disposal of low-level radioactive waste. Low-level radioactive waste (LLRW) has an exclusionary definition in law and rules, defined by what it is not. It does not include radioactive wastes that are high level, such as spent nuclear fuel, transuranic waste produced by the defense nuclear weapons program, tailings and other by-products of uranium mining and recovery, naturally occurring radioactive material (NORM), and oil and gas NORM waste.

Texas' LLRW is produced predominantly by nuclear utilities, academic and medical research institutions, hospitals, industry, and the military as distributed in Figure 5. LLRW typically consists of radioactively contaminated trash, such as paper, rags, plastic, glassware, syringes, protective clothing (gloves, coveralls), cardboard, packaging material, organic material, spent pharmaceuticals, used (decayed) sealed radioactive sources, and water-treatment residues. Nuclear power plants contribute the largest portion of LLRW in the form of contaminated ion exchange resins and filters, tools, clothing, and irradiated metals and other hardware. LLRW does not include waste from nuclear weapons manufacturing or from U.S. Navy nuclear

propulsion systems. The Texas Compact, an agreement between Texas (as the host state) and Vermont (as the party state), provides for the management or disposal of LLRW pursuant to the Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 USC 2021b–2021j).

Figure 5.
Typical Distribution of LLRW Generated in the Texas Compact



Data Source: Texas Compact Low-Level Radioactive Waste Generation Trends and Management Alternatives Study (Salt Lake City: URS Corporation. 2000), 4-104.

SB 1504, 82nd Legislature, directs the TCEQ to provide updated studies related to LLRW to the Legislature prior to the 83rd session. SB 1504 requires the TCEQ to provide three separate studies, including:

- Study on Texas Compact waste and potentially imported nonparty waste projections with recommendation on impacts to the Compact Waste Disposal Facility capacity, calculation of radioactive decay in radiation dose assessments to the public, use of containers for waste, and public health and safety effects of projected waste. Final report is due on Dec. 1, 2012. (Note that the last Texas projection study was completed in 2000.)
- Study on the adequacy of financial assurance amounts and mechanisms in light of post-closure risks and state liability. Final report is due on Dec. 1, 2012.
- Study on surcharge revenue from imported nonparty waste, including review of operational costs and expenses, and overall revenue. Final report is due on Dec. 1, 2016.

SB 1504 also provided specific direction on the regulation and licensing of the commercial management and disposal of LLRW. On Jan. 14, 2009, the TCEQ commissioners approved an order on the application for a disposal license from Waste Control Specialists LLC (WCS), and the order was signed on Jan. 20, 2009. Condemnation proceedings to acquire the mineral rights on the underlying land at which the disposal facility is located were completed during the summer of 2009. Radioactive Material License No. R04100 was signed, issued, and granted by the TCEQ on Sept. 10, 2009. The license allows disposal of commercial low-level radioactive waste from Texas and Vermont in a state-owned facility, and the disposal of federal low-level radioactive waste and mixed hazardous waste from the federal government, namely the Department of Energy (DOE), in a separate facility.

The TCEQ authorized commencement of operations at the Compact Waste Disposal Facility portion of the disposal site on April 25, 2012. The first waste shipment was received for disposal at the facility on April 27, 2012.

The Federal Waste Disposal Facility is expected to be completed in the second quarter of 2012, with authorization for the opening of disposal operations of that facility to follow.

Underground Injection Control

The TCEQ Underground Injection Control (UIC) Program's objective is to protect underground sources of drinking water (USDW) through the permitting of underground injection of fluids. Regulation of wells used for underground injection must maintain the quality of fresh water consistent with public health and welfare and the operation of existing industries supported by the use of underground injection. The TCEQ is responsible for the permitting of Class I, III,

V, and a subset of Class VI injection wells through program delegation from the EPA.

Class III UIC wells, which inject fluids for recovery of minerals (e.g., uranium, sulfur, and sodium sulfate) and a few Class V (miscellaneous) UIC wells, may require both a TCEQ permit or authorization and an aquifer exemption to allow for the injection activity in an USDW. To become effective, an aquifer exemption must be first granted by the TCEQ, and then the EPA must also approve a program revision to the TCEQ's UIC delegation, adding the newly exempted aquifer.

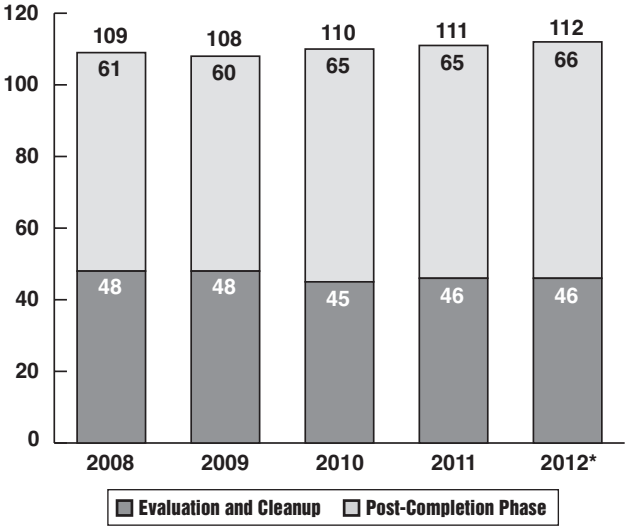
Since 2010, the EPA has not approved TCEQ-requested program revisions to add exempted aquifers, despite the successful issuance of permits and authorizations for Class III and V wells. Although 36 such program revisions have been successfully made to the TCEQ's UIC delegation in the past, since 2010 there has been a slowing of timely review by the EPA. The resulting impasse for new aquifer exemptions has effectively stopped any new Class III, and one new Class V, well operations in Texas. This impasse will affect the projected growth of a new uranium-mining project in South Texas.

Superfund Program

The Texas Superfund Program is responsible for assessment, evaluation, remediation, and post-completion activities at state and federal Superfund sites in Texas. The program includes the Superfund Site Discovery and Assessment Program (SSDAP) and the Preliminary Assessment/Site Inspection (PA/SI) Program, which identify and rank sites contaminated with hazardous substances for the state and federal Superfund programs, respectively. The Texas Superfund Program was created in 1985 by an amendment to the Solid Waste Disposal Act. Since then, 111 Superfund sites in Texas have been successfully remediated and no longer pose an imminent threat to public health and safety or the environment.

The number of Superfund sites in Texas remains fairly static, as is detailed in Figure 6, below. The Texas Superfund Program is currently addressing 112 active sites. These include 56 sites in the post-completion phase, during which the agency is responsible for the long-term and sometimes indefinite operation of remedies put in place during the remedial action. Post-completion activities may include maintenance of treatment systems and on-site waste containment, long-term groundwater monitoring, and general site security.

Figure 6.
Superfund Sites in Texas



*Data for FY 2012 is current as of the end of the 2nd quarter.
Data Source: Remediation Division, Office of Waste.

Of the 112 active Superfund sites in Texas, 53 are state sites and 59 are federal. It is anticipated that two additional state sites and one additional federal site will be proposed to the State Superfund Registry and the National Priorities List, respectively, by the end of fiscal 2013.

The SSDAP assesses the eligibility of sites for the federal and state Superfund programs. Candidate sites are identified through referrals from internal and external groups, including the TCEQ's Enforcement and Water Quality divisions, TCEQ regional offices, and the EPA. In fiscal 2011, the SSDAP completed assessments at 103 potential sites, 20 of which were designated PA/SI federal sites. In fiscal 2012, as of March, the SSDAP has completed assessments at 89 potential sites, 55 of which were designated PA/SI federal sites.

In general, the number of potential Superfund sites to be assessed remains fairly static. Currently there are 756 potential Superfund sites awaiting assessment.

For fiscal 2012, the appropriated remediation budget for the Texas Superfund Program was $8.7 million. The Superfund Program has been awarded a total of $3.0 million in grant funding from the EPA and the Department of Energy for assessment, site inspection, and management assistance activities to support the Federal Superfund Program during the fiscal years 2011 and 2012. Approximately $2.3 million of the $3.0 million has been awarded to date.

Budget constraints resulting from on-going immediate-response actions addressing imminent threats to human health and the environment, as well as increasing cost-sharing obligations with the EPA at federal Superfund sites, have required that the agency allocate funds for large-scale cleanups, site discovery and assessment, and post-completion activities based on a strategy. Accordingly, remediation of lower-priority sites may be potentially delayed or phased over longer periods.

Additionally, the current economic climate has seen an increase in Superfund site cleanup costs and bankruptcy filings among known Remediation Division sites, resulting in an overall increase in the current and potential Superfund Program's liabilities. It is difficult to determine at this time how many sites in bankruptcy will be managed by the Superfund Section in the future. Moreover, as the program continues to discover and clean up contaminated sites, additional sites will move into the post-completion phase, which will reduce the amount of money that is available for discovery and cleanup.

Nuisance and Abandoned Buildings

Rural Texas communities are facing challenges dealing with a growing number of abandoned homes and buildings. These abandoned structures contribute to blight in communities and create opportunities for undesirable and illicit activities. They also present health and safety concerns to citizens, caused by rodents, structurally unsound buildings, and potential fire dangers. Many of these communities would like to demolish these structures. However, demolition can be costly and results in debris that is regulated as municipal solid waste. This creates additional costs for the transportation of the demolition waste to an approved landfill and its subsequent disposal.

The 82nd Legislature passed SB 1258, amending the Texas Health and Safety Code (THSC) 361.126 to authorize the TCEQ to issue a permit by rule (PBR) for the disposal of demolition waste from nuisance or abandoned buildings. The authorization applies to a building that has the four following features:

- Is in a county or municipality with a population of 10,000 or less.
- Has been abandoned or found to be a nuisance.
- Has been acquired by the county or municipality by means of bankruptcy, tax delinquency, or condemnation.
- Was previously owned by a person not financially capable of paying the costs of the disposal of demolition waste at a permitted solid waste disposal facility, including the transportation of the waste to the facility.

Under the provisions, disposal must occur on land that the county or municipality owns or controls and that would qualify for an arid exemption under TCEQ rules. The PBR authorization will significantly reduce the costs for the transportation and disposal of waste from the demolition of nuisance and abandoned buildings. The TCEQ proposed rules on Feb. 8, 2012, to implement these requirements. These rules are scheduled to be considered for adoption by the commission on July 25, 2012.

Sham Recycling

Recycling and reuse minimize waste by putting materials back into products and reducing the consumption of raw materials. Legitimate recycling operations in Texas reduce the amount of waste being placed in landfills, which is both environmentally and economically beneficial. Types of recyclers include construction and demolition materials; electronics; single-stream residential (paper, plastics, metal); and composting and mulching.

Current statutes and regulations allow for certain types of recycling facilities to operate with limited TCEQ oversight. There is a desire to limit the regulatory burden in order to encourage the establishment and operation of recycling facilities. Statutes and regulations allow for certain types of recycling facilities operated by government entities, those affiliated with landfill operations, and those that do not receive any financial compensation to receive materials, to operate without notification to the TCEQ.

However, an appropriate level of oversight is needed to minimize sham recycling operations. "Sham recycling" occurs when purported recycling operations derive most of their income from charges to accept material, with a disproportionately lesser amount of material actually being recycled and put to beneficial use. Such operations use the recycling claim to circumvent regulatory requirements to obtain a permit or registration for storage or processing of waste. There are a number of sham recycling operations in the state and these operations may pose fire hazards and create public-nuisance issues. A number of sham recycling facilities appear to be primarily receiving construction and demolition material, including wood, sheetrock and asphalt shingles; or brush from landscaping and land-clearing activities. If sham recycling facilities are abandoned, the state and local governments may be responsible for cleanup and fire response. In addition, the commission is experiencing resource strains as a result of addressing these sham recycling operations. The waste disposal industry, as well as legitimate recycling operations, has also expressed concern with the number of sham recyclers.

To address these issues, the commission is evaluating possible revisions to existing statutes and rules to enhance clarity and enforceability to reduce sham recycling operations.

Regional Solid Waste Grants Program

The State of Texas Regional Solid Waste Grants Program (RSWGP) is administered in the Office of Waste by the Waste Permits Division. The RSWGP was established under Texas Health and Safety Code (TH&SC), Section 361.014(b), to fund regional solid waste planning initiatives, to maintain 24 regional solid waste management plans and programs, and to establish and maintain an inventory of closed and abandoned landfills. The program is managed through grant contracts with the 24 regional planning commissions, also known as councils of governments (COGs). The COGs use the state pass-through grant funds to:

- maintain a solid waste advisory committee
- provide technical assistance to local governments
- conduct sub-grant pass-through solicitations, awards, and administration
- provide education, training, and outreach, and serve as resource centers for regional education and outreach materials
- conduct data collection and analysis
- maintain a closed-landfill inventory
- maintain a Regional Solid Waste Management Plan
- conduct reviews of municipal solid waste permit applications received by the commission for consistency with each respective regional plan

Eligible entities include cities, counties, COGs, public schools or public school districts, and other state-authorized districts or authorities with responsibility for solid waste and water quality planning.

The program operates on state fees and designated solid waste fee revenue, or "tipping fees," as provided by TH&SC 361.013. Approximately 50 percent of each $1.25/ton paid by a landfill for receipt of waste goes into the Solid Waste Disposal Fee Account, which collects about $20 million per year. These monies are distributed to each of the 24 COGs based on a formula that takes into account population, geographic area, percentage of solid waste fee revenue generated within each region, and public health needs.

Allowable project categories include:

- Local enforcement projects, which may include funding local code enforcement officers, illegal dumping signs, cameras, or enforcement vehicles.
- Litter and Illegal Dumping Cleanup and Community Collection Event projects, which may include cleanups of illegal dumping sites and river cleanups.

- Source Reduction and Recycling projects, which may include solid waste diversion or reduction, reduce, reuse, recycle, or re-buy projects.
- Household Hazardous Waste Management projects, which may include permanent collection facilities or events.
- Citizens' Collection Stations or "Small" Registered Transfer Stations, which may include liquid waste transfer stations or recycling facilities.
- Education and Training projects, which may include public-service announcements and education and outreach materials.
- Technical studies, such as Regional Recycling Rate Benchmarking studies or local government Disaster Debris Management Plans.
- Local Solid Waste Management Plans.
- Other projects, which may include scrap-tire management or illegally dumped scrap tire removal and recycling.

Funding for the Regional Solid Waste Grants Program was reduced by 50 percent of the previous year's funding by the 82nd Legislature. For fiscal years 2012–2013, the COGs were allocated approximately $5.5 million per fiscal year. To help minimize the impact to the COGs and local governments receiving funding, the Waste Permits Division extended the fiscal years 2010–2011 biennium contracts through February 2013, which carried monies into the new biennium and allowed the COGs to maintain their regional solid waste planning program infrastructure. However, the overall funding reduction will result in fewer dollars being passed through to local governments and fewer solid waste services being provided by each COG.

Elemental Mercury Storage

Pursuant to the Mercury Export Ban Act of 2008 (MEBA), the U.S. Department of Energy (DOE) has been directed to designate a facility or facilities for the long-term management and storage of elemental mercury generated within the United States. The selected facility (or facilities) will have to be constructed and operated in accordance with the Resource Conservation and Recovery Act (RCRA) standards to manage approximately 11,000 tons of elemental mercury. The DOE prepared an environmental impact statement (EIS) to analyze the potential environmental, human health, and socioeconomic impacts of elemental mercury storage at various locations. The DOE issued the final EIS on January 19, 2011, and US EPA published the Notice of Availability of the final EIS in the *Federal Register* on Jan. 28, 2011. The EIS identified a facility in Texas (Waste Control Specialists LLC [WCS]) as the preferred alternative. The DOE, however, has not made a final site selection. The final selection of a site will be based on the EIS and other appropriate factors and will be announced in a "Record of Decision" (ROD) in the *Federal Register*. The DOE has published information on its website that the ROD is due for publication in August 2011; however, the ROD has not been published as of May 2012.

If WCS is selected as the preferred site, the facility (or facilities) will be required to obtain a new RCRA permit and/or a modification to its existing RCRA permit issued by the commission (or the EPA, in order to comply with the MEBA requirements). Senate Bill 1504 (82nd Legislative Session, 2011) added a state fee on any radioactive waste and elemental mercury storage exceeding one year at a location at or adjacent to the WCS Compact Waste Disposal Facility.

PST Energy Act Inspections/ Funding Issues

This act requires that underground storage tank (UST) facilities be inspected every three years. Texas has approximately 18,000 registered UST facilities, meaning that approximately 6,000 facilities must be investigated annually to meet the three-year inspection cycle. A third party was contracted to coordinate and perform investigations as directed by TCEQ staff. The current three-year inspection cycle began on Oct. 1, 2010, and will end on Sept. 30, 2013. In the first year of the three-year cycle, 5,239 investigations were conducted and approved. It is expected that the second year the 6,000-facilities-investigated mark will be met. The EPA has approved fiscal 2013 funding that will continue to support the contracted investigations and

support investigations conducted by TCEQ regional staff as well. The EPA has informed the TCEQ that funding cuts are expected in fiscal 2014 and beyond; therefore, the sustainability of the Energy Act investigations in the future is uncertain.

Other Key Issues

Used Electronics Reuse and Recycling

For several years, under general statutory mandates to promote reuse and recycling, the TCEQ facilitated the reuse and recycling of used electronics through online recycler-locator services and outreach. House Bill (HB) 2714, passed by the 80th Legislature, in 2007, required the TCEQ to help implement a computer-equipment recycling program in Texas based on individual manufacturer responsibility and shared responsibility among consumers, retailers, and state government. On May 21, 2008, the commission adopted rules implementing the program.

In the first three years of the program, computer manufacturers have reported collecting a total of nearly 50 million pounds of covered computer equipment. The program is ongoing.

Senate Bill (SB) 329, passed by the 82nd Legislature, in 2011, created a television-equipment recycling program, separate from and more extensive than the existing computer-equipment recycling program. The new program includes shared responsibility among consumers, retailers, recyclers, manufacturers, and the government of this state for recycling covered television equipment. On March 28, 2011, the commission adopted new rules for implementing the program.

Under the new program, manufacturers of covered television equipment have a choice on how to comply: by implementing a recovery plan or by participating in a Recycling Leadership Program.

If a manufacturer chooses to comply by implementing a recovery plan, they must do the following:

- Label televisions with their own brand.
- Register with the state and pay a registration fee of $2,500 each year, starting January 2013.
- Establish programs that meet their required market share for the collection, transport, and recycling of television equipment from consumers–free to consumers at the time of recycling.
- Submit a plan with details of their recycling program to the TCEQ.
- Report to the TCEQ annually, beginning January 2013, the weight of televisions sold by the manufacturer in the state or nationally, and the weight of televisions collected, recycled, and reused during the preceding calendar year.

If a manufacturer chooses to comply through a Recycling Leadership Program, they are exempt from the market-share requirement and the registration fee. Each manufacturer, through an RLP, must:

- Label televisions with their own brand.
- Register with the TCEQ by Jan. 31, 2013, and renew their registration annually.
- Provide at least 200 collection sites or programs to offer television recycling to consumers. The recycling must be free of charge, unless a financial incentive of equal or greater value is provided at the same time.
- Establish a public-education program, including self-developed outreach materials, to inform customers about opportunities for television recycling.
- Provide annually, beginning Jan. 31, 2013, a list of television manufacturers in the RLP, documentation on their public-education program, and a list of the 200 sites or programs planned for the current year.
- Report bi-annually to the TCEQ, beginning Jan. 31, 2015, the opportunities available for consumers to recycle televisions, specifically listing opportunities in areas that have populations less than 50,000; the weight of televisions collected for the previous two years, separated by year; and documentation that a public-education program is in place by the RLP or individual manufacturer.

As of April 1, 2013, retailers must only sell brands of television equipment that are on a TCEQ list of

manufacturers in full compliance, individually or through an RLP. They must also supply consumers, at the point of sale, written information, published by the TCEQ, regarding the legal disposition and recycling of television equipment.

Under this program, recyclers of covered television equipment must:

- Register with the TCEQ, beginning January 2013, to certify compliance with the program, and renew their registration annually.
- Report annually to the TCEQ, beginning January 2014, the total weight of covered television equipment collected, received, and recycled in the preceding year.

Under the new program, the TCEQ must:

- Beginning Nov. 1, 2013, determine annually the television recycling rate for the state, and use this rate to determine the market share for each manufacturer complying individually.
- Implement a public-education program for consumers regarding television equipment reuse and recycling.
- Maintain an Internet site listing television manufacturers in compliance with program requirements, beginning April 1, 2013.
- Operate a toll-free telephone number to provide specific information on television recycling.
- Provide information in writing to each county and municipality in the state on the legal disposal and recycling of television equipment.
- Beginning March 1, 2014, report to the Legislature bi-annually on information compiled from the results of television manufacturers' reports.

Oil and Gas Operations

The TCEQ is using innovative approaches and state-of-the-science technology to accurately quantify, analyze, assess, and mitigate emissions from oil and gas operations. The TCEQ has increased the coverage of its ambient air monitoring network and increased the number of mobile monitoring activities to fully evaluate potential health effects and has conducted an intensive special oil and gas emissions inventory to identify the number and location of emissions sources in the Barnett Shale.

There are numerous other TCEQ initiatives to assess and address emissions from oil and gas operations that have been completed or are ongoing. These include pollution prevention outreach, workshops, aerial surveys, ground-based monitoring, rapid-response investigations, rule changes, inventory-improvement projects, emissions-factor evaluations, and other related research. These initiatives have and will continue to find real-world solutions that reduce emissions through improved agency policies, guidance for regulated entities, increased public awareness, and potential enforcement. Additional information about many of these activities and projects can be found at the website <www.tceq.state.tx.us/goto/barnettshale>.

Emerging Issues Associated with Oil and Gas Operations

With enhanced drilling methods and increased demand for natural gas, exploration for oil and gas has increased statewide. The increased oil and gas activity in urban areas experienced in the Barnett Shale provided new potential impacts to air quality for TCEQ to address. The Barnett Shale covers about 5,000 square miles and 24 counties in North Texas. A large portion of the producing shale is located in urban areas of North Texas, including Tarrant County. With this increased potential impact, the TCEQ's Dallas–Fort Worth (DFW) regional office has experienced a significant increase in complaints and requests for monitoring in both rural and urban areas.

The increased development in the Eagle Ford Shale has also affected the TCEQ. The Eagle Ford Shale trends across Texas from the Mexican border up into East Texas, roughly 50 miles wide and 400 miles long, with an average thickness of 250 feet. A large portion of the producing shale is located in rural south central Texas areas stretching from as far west as Maverick, Dimmitt, and Webb counties to as far east as Brazos and Grimes counties. The increased exploration and production activity has brought municipal waste disposal infrastructure concerns, as well as

impacts to roadways and small businesses. Additionally, increased production activities have increased the need for options for drilling-waste disposal.

Issues

- Increased public concern.
- Increased complaints regarding drilling, fracturing, production, and compression.
- Need for infrastructure for drinking water, wastewater, municipal waste disposal, and transportation.
- Increased need for options for drilling-waste disposal.

Agency Actions

Since fiscal 2010, a number of actions have been taken and planned to address issues related to oil and gas operations. These activities fall into five broad categories:

- Enhanced investigation protocols
- Increased monitoring
- Outreach
- Emissions inventory
- Rulemaking

Enhanced Investigation Protocols

In December 2009, the agency implemented a 12-hour response time for all complaints received concerning oil and gas facilities in the 24-county Barnett Shale area. From Jan. 2, 2009, through April 9, 2012, over 1,179 complaints have been investigated. Currently, Barnett Shale complaints average about 30 per month.

As of Feb. 27, 2012, the 12-hour complaint response, or "Immediate Response" priority, was modified to include complaints about odors or emissions from oil and natural-gas activities in the Barnett Shale that are currently occurring and constitute an imminent threat to public health, safety or the environment and complaints concerning odor from an oil or natural-gas site with confirmed odor-nuisance conditions in the previous 12 months. This means that an on-site investigation will be conducted by the Dallas–Fort Worth Region staff within 12 hours of receipt of the complaint by the regional office. All other oil and natural-gas related complaints across the state are given priority in accordance with the Field Operations Standard Operating Procedures.

In addition, the DFW regional staff conducts periodic reconnaissance investigations in selected areas. The regional office also conducts monitoring, as time and resources permit, at the request of the public and other interested parties. In addition, scheduled compliance investigations are conducted at natural-gas sites to determine compliance with applicable rules and regulations. Since March 2009, over 1,302 summa canister samples have been taken by regional staff. This data helps identify potential issues and emissions with various natural-gas processes and also helps to identify specific sites for more in-depth investigation. To help with these activities, seven additional full time employees have been added to the DFW regional office. Currently there are ten investigative staff and one supervisor dedicated to addressing natural-gas issues in the Barnett Shale area. Four handheld GasFindIR cameras and additional VOC monitoring equipment have also been allocated to the DFW regional office.

Increased Monitoring

Since approximately Aug. 2, 2009, the TCEQ has surveyed 1,877 sites in the Barnett Shale area using the GasFindIR camera and at 1,834 of these sites, a handheld volatile organic compound sampler was also used. Based on observations with these instruments, 1,080 canister samples were collected. This included 1,050 samples and 29 field-quality control samples (i.e., duplicate samples and field blanks). In addition, samples have been collected via mobile Real-Time Automated Gas Chromatograph.

The Field Operations Support Division has conducted numerous ambient-monitoring projects in the Barnett Shale area since 2009, including sampling trips in August, October, and November 2009, and March, June, July and November 2010. In December 2009 and April 2010, ambient-monitoring trips were also conducted specifically in the City of Fort Worth.

In August 2011, the TCEQ conducted aerial surveys of the Eagle Ford Shale area as a proactive tool. Follow-up investigations were conducted at 193 sites.

Outreach

The Office of Compliance and Enforcement continues to coordinate with the Small Business and Environmental Assistance Division on outreach events related to oil and gas operations.

In fiscal years 2008 and 2009, the TCEQ provided 10 free workshops across the state for oil and gas companies, offering strategies on how to improve efficiency and prevent pollution.

In fiscal 2010, the TCEQ conducted a workshop in Arlington that offered participants compliance assistance and information about pollution prevention. Attendees included environmental, health, and safety managers; production managers; field personnel; and engineers who work in the Barnett Shale area. Workshop topics included air permitting and emissions inventory requirements as well as best practices and pollution prevention.

In fiscal 2011, the TCEQ conducted several oil and gas outreach activities throughout the state. In the Barnett Shale area, the TCEQ held an open house that gave area residents an opportunity to learn about agency programs and ask questions of technical staff. The TCEQ also conducted an emissions inventory workshop that provided guidance to the regulated community on completing the Barnett Shale Special Inventory. Additionally, staff presented a series of three workshops that covered specific permits: the Barnett Shale permit by rule (PBR) and standard permit. In South Texas, the TCEQ held three oil and gas workshops to educate local government representatives on the differences between TCEQ and RRC jurisdictions, and address concerns about oil and gas companies' compliance with regulations for air, water, and waste.

In fiscal 2012, the TCEQ conducted an air-authorization workshop for small oil-production companies in Caldwell County. The TCEQ also gave presentations on the differences between TCEQ and RCC jurisdictions for several local governments, residents, and industry groups. Additionally, the TCEQ presented a discussion on water reuse, water rights, and water hauling to several local governments in South Texas that have been approached about using their effluent for hydraulic fracturing.

The TCEQ has created an oil and gas website, <www.TexasOilandGasHelp.org>, which offers specific information organized under the categories of air, water, and waste. The website serves as a gateway to the TCEQ's Web information for the regulated community, local governments, and Texans who seek regulatory information related to the industry.

Emissions Inventory

In an effort to get a true picture of the oil and gas universe and to quantify emissions, the TCEQ began the first phase of a two-part emissions inventory in April 2010. The first phase is the physical inventory and the second phase is the emissions modeling. A summary of the Barnett Shale emissions inventory data is available to the public and can be found at the TCEQ's Point Source Emissions Inventory website, <www.tceq.texas.gov/goto/psei>.

Rulemaking

On May 30, 2012, rules were proposed to revise the oil and gas PBR and standard permit to address setback distances and the historical notification deadline. The proposed rule also adjusts the counties in which the existing Barnett Shale PBR and standard permit requirements are applicable. Adoption of these rules is scheduled for October 2012.

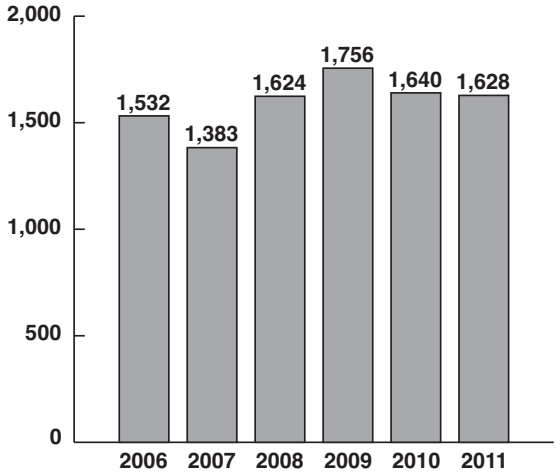
Enforcement Initiatives

Enforcement Administrative Orders

The TCEQ issued 1,628 administrative orders in fiscal 2011 (see Figure 7) with over $12.5 million to be paid as penalties and over $5 million to be expended for supplemental environmental projects (SEPs). There were an additional 29 civil judicial orders issued through representation by the Texas Attorney General's Office that resulted in over $4.3 million to be paid as penalties and $115,000 to be expended for SEPs. Most of the enforcement orders issued by the TCEQ were for the water program (40%) and were the result

of several initiatives by the agency, including an initiative targeted at water treatment plants and drinking-water systems to ensure that these facilities have emergency generators for a backup power source.

Figure 7.
Total Number of Administrative Orders Issued, by Fiscal Year



Data Source: Annual Enforcement Report, Fiscal Year 2011 (Austin: TCEQ, 2011).

Field Citations

The Field Citation (FC) Program was originally approved as a pilot on March 13, 2006. During the April 27, 2007, Commissioner's Work Session, the TCEQ commissioners voted to shift the TCEQ's FC program from pilot to permanent status.

In response to the approved penalty-policy revision at the Sept. 28, 2011, work session, the FC Program was revisited, and revised to reflect changes in the statutory maximum penalties and to add violations that were eligible for the program. This was approved at the Nov. 2, 2011, Commissioners' Agenda meeting.

The program includes only violations that were determined by the commission to be "clear cut" and able to be easily corrected to help make the enforcement process more efficient for both the TCEQ and the regulated entity involved.

The field citation is intended to promote a quick resolution for any of the field citation-eligible violations that are documented during a TCEQ investigation, while offering a reduced penalty as compared to a penalty calculated through the traditional enforcement process.

The Field Citation Program covers violations in the following programs:

- Petroleum Storage Tank (PST)
- Gasoline Vapor Recovery (Stages I and II)
- Stormwater (industrial and construction)
- Occupational Licenses
- Dry Cleaners
- Landscape Irrigation
- On-site Sewage Facilities
- Outdoor Burning
- Nuisance Dumping
- Water Rights

Since the program's inception, and as of May 3, 2012, 765 field citations have been issued and 582 have been paid with the violations corrected. There are three separate Field Citation forms: one for the PST Program, which covers 13 violations; one for the Water Program, which covers eight violations: and an Air/Waste form, which covers six violations.

Dam Safety Program

The Dam Safety Program monitors and regulates both private and public dams in Texas. The program inspects dams that pose a high or significant hazard at least once every five years and provides recommendations and reports to responsible parties (owners) to help them maintain safe facilities. The program ensures that these facilities are constructed, maintained, repaired, and removed safely. High- or significant-hazard dams are those where loss of life could occur if the dam should fail.

As a result of the 2008 state audit, and in response to the interests of the Senate Committee on Natural Resources, the agency submitted an exceptional-item request to augment the Dam Safety Program. This request was approved for the 2010–2011 fiscal biennium, increasing the number of staff of the Dam Safety Program and providing data support. New rules were developed and became effective Jan. 1, 2009. The

requirement for emergency action plans for high- and significant-hazard dams was added at that time. The rule revisions:

- Established requirements for emergency action plans, gate operating plans, and security plans, and better defined the responsibilities of the dam owner.
- Required new dams to meet certain design standards and existing dams to have additional nonstructural measures in place.
- Removed small and intermediate-size, low-hazard dams from the periodic inspection schedule, and established an inspection frequency of five years for high- and significant-hazard dams and large, low-hazard dams.
- Allowed inspections by the owner or the owner's representative in lieu of agency inspections.
- Changed the definition of "dam," thereby reducing the number of small, low-hazard dams under the jurisdiction of the agency.
- Updated existing criteria to make them more consistent with current engineering practices.

During the 81st Legislature, $2.5 million was appropriated for 24 additional staff over a two year period. As a result, there are now 27 technical staff members and two administrative staff members in the Dam Safety Section, Critical Infrastructure Division. There are also two technical staff located in two regional offices: Houston and Dallas–Fort Worth.

The TCEQ Sunset legislation, HB 2694, 82nd Legislature, amended Texas Water Code (TWC) 12.052, to exempt all dams on private property that impound 500 acre-feet or less and meet certain other conditions from complying with requirements relating to dam safety. These statutory changes, along with a Sunset Advisory Commission's management directive to exempt dams that are classified as low-hazard from adhering to hydrologic and hydraulic criteria, required changes to the agency's Dam Safety Program.

As of March 1, 2012, there are 7,126 state-regulated dams, with 1,046 high-hazard dams and 725 significant-hazard dams. The remaining are classified as low-hazard dams. The Sunset legislation described above removed 205 significant-hazard dams from the inspection program starting Sept. 1, 2011.

The program had a commitment to conduct inspections on all high- and significant-hazard dams over a five-year period ending Aug., 31, 2011. As of Aug. 31, 2011, there were 1,773 dams in the high- and significant-hazard classifications. Of these, 1,764, or 99.5 percent, had been inspected. The remaining dams had not been inspected, due to access or scheduling issues.

The staff has increased the total number of assessments conducted. For fiscal 2009, the number was 679, up from 480 in fiscal 2008. For fiscal 2010, the number was 1,255, and in fiscal 2011, the number was 1,041. The number of field inspections has also increased. There were 459 in fiscal 2008, 514 in fiscal 2009, 580 in fiscal 2010, and 535 in fiscal 2011. The number of emergency action plans reviewed has increased as well. There were 39 in fiscal 2008, 52 in fiscal 2009, 384 in fiscal 2010, and 426 in fiscal 2011. Since January 2009, when new rules became effective, approximately 1,200 emergency action plans have been received.

Four dam-owner workshops were conducted in fiscal 2010 (409 people registered) and four in fiscal 2011 (262 people registered). These workshops are conducted primarily to provide information regarding emergency action plans and maintenance of dams for dam owners and engineers; however, emergency personnel have also attended the workshops.

Approximately 50 percent of the dams inspected are either in fair or poor condition. However, the majority of owners are taking the inspection results seriously and are making repairs as funds are available. Costly items, such as major repairs and modifications, are being delayed until funds become available.

Plans for FYs 2013–2017

It is anticipated that staff will continue to conduct inspections of high- and significant-hazard dams on a five-year frequency, with the intent that all high- and significant-hazard dams be inspected by Aug. 31, 2016. In addition, emphasis will be placed on inspecting

dams more frequently if they have been found to be in poor condition. The staff is also in the process of identifying dams that are not in the Dam Safety Inventory, as recommended in the State Auditor's Office report. As these dams are identified, they will be added to the inspection schedule if they are determined to be high- or significant-hazard dams.

The program will also continue to review emergency action plans as they are received. Additional workshops will be held to address maintenance, emergency action plans, and ways to correct dam deficiencies.

Critical Infrastructure Division

On Nov. 1, 2011, the TCEQ Office of Compliance and Enforcement (OCE) created the Critical Infrastructure Division. This new division combines elements from within OCE that are critical to the agency's responsibilities under the State of Texas Homeland Security Strategic Plan for achieving a safer, more secure, and more resilient state. To accomplish this, the division seeks not only to assure compliance with environmental regulations to protect human health and the environment, but also during disaster conditions to support regulated critical infrastructures that are essential to the state and its citizens for responding to, and recovering from disasters.

The Critical Infrastructure Division consists of the following three sections:

- Dam Safety
- Homeland Security (including radioactive-materials compliance investigations and the federally funded BioWatch Program)
- Emergency Management Support

The Dam Safety Section monitors and regulates both private and public dams in Texas. The program inspects dams that are classified as a high- or significant-hazard and provides recommendations and reports to responsible parties (owners) to help them maintain safe facilities. The program ensures that these facilities are constructed, maintained, repaired, and removed safely. High- or significant-hazard dams are those that could have loss of life if the dam should fail. (See information on the Dam Safety Program, above.)

The Homeland Security Section assists in the planning, development, coordination, and implementation of initiatives to promote the governor's homeland-security strategy, and to detect, deter, respond to, and recover from disasters, whether caused by nature or manmade. The TCEQ Homeland Security Coordinator is on-call 24/7 to facilitate requests for assistance from the Texas Homeland Security Office and the Texas Division of Emergency Management.

Homeland Security includes the following programs:

- BioWatch Program, a federally funded initiative for air monitoring that provides for early detection of bioterrorism agents, to enable the earliest possible response to an attack.
- Radioactive Materials Compliance Program, which conducts radioactive-materials compliance investigations and inspections of construction, operation, security, and closure procedures at regulated facilities. The program's personnel are members of the state radiological emergency response team, and also includes two resident inspectors at the low-level radioactive-waste disposal facility in Andrews County, Texas.

The division includes the Emergency Management Support Team (EMST), which provides critical support for the state's capability to prepare for, respond to, and recover from natural and manmade disasters. This team supports the TCEQ regional offices by providing enhanced disaster preparedness training and state-level coordination to prepare for, respond to and recover from large-scale or statewide disasters.

The division represents the TCEQ on the State Emergency Management Council and the Texas Homeland Security Council, and is responsible for ensuring that the agency meets its obligations under the State of Texas Emergency Management Plan. In doing so, the division coordinates with program areas across the agency to make sure that the resources needed to remain operational after a disaster are available, and assists them with assessments of, and restoration

of services at critical infrastructure facilities that the agency regulates. The critical infrastructure facilities regulated by the TCEQ include public drinking water systems, dams, refineries, petrochemical facilities, wastewater-treatment facilities, and a low-level radioactive waste disposal facility.

Division staff are located in the central office and two regional offices, and also at the Waste Control Specialists low-level radioactive waste disposal facility in Andrews County, Texas.

The division goals for the next five-year period include organizing and training new Disaster Response Strike Teams within each regional office. The new EMST is meant to support the TCEQ regions by providing enhanced emergency or disaster response preparedness training and coordination that is consistent across the agency and to support their efforts to respond to large-scale or statewide disasters.

Data Center Consolidation

The 79th Texas Legislature passed HB 1516, which directed state agencies to take an enterprise approach to managing the state's investment in information and communications technology. While consolidation and transformation have been challenging, the TCEQ has been an active participant.

The TCEQ's goal in this process is to meet its mission effectively and efficiently, while minimizing financial and operational risk and impact. The TCEQ will continue to work on logistical and financial concerns with the parties involved. As of April 2012, the TCEQ has 40 servers operating at the State Data Centers. The agency will continue to engage in the transformation effort in alignment with the new schedule developed by the Texas Department of Information Resources and the new Data Center contract service providers, ACS and Capgemini.

Expanded E-Government

The agency will continue to develop and refine electronic services to increase online permitting, registration, and reporting options for regulated customers, as well as improve access to TCEQ data for all interested parties. Planned and ongoing efforts include, but are not limited to, the following:

- The TCEQ continues to expand the capabilities provided to the regulated community for electronically submitting permit and registration applications and required reports. Recently added capabilities include renewal and notice of change for multi-sector general permits, notice of intent for municipal solid waste recycling, registration of marine sanitation devices, registration of pump-out stations, submission of annual reports for the pollution prevention program, and quarterly reports from municipal solid waste facilities. Capabilities planned for the next couple of years include water quality registrations of aggregate production operations, construction permit renewals, CAFO general permit renewals, annual reports for municipal solid waste facilities, and reporting of low-level radioactive waste shipment manifests.
- General permits for multi-sector industrial stormwater, construction stormwater, pesticides, and concentrated animal feeding operations include fee incentives for applicants to use ePermits. The TCEQ plans to offer fee incentives for additional water quality and air applications, including the registration of aggregate production operations.
- The Permit and Registration Information System (PARIS) application will replace an aging system supporting three regulatory registration and permitting programs: industrial and hazardous waste (IHW), petroleum storage tanks (PST), and water quality (WQ). PARIS IHW registration and billing functionality went into production in September 2011. PST is scheduled for production in spring of 2013, and WQ in summer of 2013.
- The TCEQ modified its ePay application to use the common checkout pages provided by the Texas.gov portal in order to comply with payment-card industry data-security standards.

- The TCEQ continues to increase public access to its data. The Central Registry Integrated Web Reporting (CR-IWR) application provides a central portal to data about regulated entities and customers, as well as non-confidential information and program-specific data from many of the agency's databases. In some cases, specific documents such as PST registrations, PST fuel-delivery certificates, IHW notices of registration, and some permits are available online. The TCEQ plans to improve its existing data-quality-assurance functions using geospatial technology. Geospatial tools will also be added to the CR-IWR application to allow the public to search for sites near a location and display the results on a map.
- The TCEQ developed an interactive, geospatial website that presents the results of air quality monitoring samples collected in North Texas in a time series–based format. The scope of the Air Quality Monitoring Viewer, available at <gis3.tceq.state.tx.us/AQMV>, will be expanded to present data from mobile air-monitoring locations statewide.

Part IV

Strategic Planning Structure

Goals, Objectives, and Strategies, Fiscal Years 2014–2015

At the time of this printing, these performance measures and definitions had not received formal approval from the Legislative Budget Board or the Governor's Office of Budget, Planning, and Policy.

Goal 01. Assessment, Planning, and Permitting

To protect public health and the environment by accurately assessing environmental conditions, by preventing or minimizing the level of contaminants released to the environment through regulation and permitting of facilities, individuals, or activities with potential to contribute to pollution levels.

Goal 01, Objective 01

To decrease the amount of toxic chemicals released into the environment via air, water, and waste pollutants in Texas by at least 2 percent as measured by comparing the most recent Toxic Release Inventory (TRI) values to the previous reported TRI reporting year values and reduce air, water, and waste pollutants through assessing the environment.

Outcome Measures

01-01.01 Annual percent of stationary and mobile source pollution reductions in non-attainment areas

01-01.02 Nitrogen oxides (NO_x) emissions reduced through the Texas Emissions Reduction Plan (TERP)

01-01.03 Percent of Texans living where the air meets federal Air Quality Standards

01-01.04 Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state

01-01.05 Percent of classified Texas surface waters meeting or exceeding water quality standards

01-01.06 Annual percent of solid waste diverted from municipal solid waste disposal facilities

01-01.07 Annual percent decrease in the toxic releases in Texas

01-01.08 Annual percent decrease in the amount of municipal solid waste going into Texas landfills

01-01.09 Percent of high- and significant-hazard dams inspected within the last five years

01-01.10 Number of acres of habitat created, restored, and protected through implementation of estuary action plans

01-01-01. Air Quality Assessment and Planning

Reduce and prevent air pollution by monitoring and assessing air quality, developing and/or revising plans to address identified air quality problems, and assist in the implementation of approaches to reduce motor-vehicle emissions.

Output Measures

01-01-01.01 Number of point-source air quality assessments

01-01-01.02 Number of area-source air quality assessments

01-01-01.03 Number of on-road mobile-source air quality assessments

01-01-01.04 Number of non-road mobile-source air quality assessments

01-01-01.05 Number of air monitors operated

01-01-01.06 Tons of NO_x reduced through the Texas Emissions Reduction Plan

01-01-01.07 Number of vehicles replaced and/or repaired through LIRAP Assistance

Efficiency Measures

01-01-01.01 Percent of data collected by TCEQ continuous and non-continuous air-monitoring networks

01-01-01.02 Average cost per air quality assessment

01-01-01.03 Average cost of LIRAP vehicle emissions repairs/retrofits

01-01-01.04 Average cost/ton of NO_x reduced through the Texas Emissions Reduction Plan

Explanatory Measures

01-01-01.01 Number of days ozone exceedances are recorded in Texas

01-01-02. Water Resource Assessment and Planning

Develop plans to ensure an adequate, affordable supply of clean water by monitoring and assessing water quality and availability.

Output Measures

01-01-02.01 Number of surface water assessments
01-01-02.02 Number of groundwater assessments
01-01-02.03 Number of dam safety assessments

Efficiency Measures

01-01-02.01 Average cost per dam safety assessment

Explanatory Measures

01-01-02.01 Percent of Texas' rivers, streams, wetlands and bays protected by site-specific water quality standards
01-01-02.02 Number of dams in the Texas Dam Inventory

01-01-03. Waste Management Assessment and Planning

Ensure the proper and safe disposal of pollutants by monitoring the generation, treatment, and storage of solid waste and assessing the capacity of waste disposal facilities; and by providing financial and technical assistance to municipal solid waste planning regions for the development and implementation of waste reduction plans.

Output Measures

01-01-03.01 Number of active municipal solid waste facility capacity assessments

Efficiency Measures

01-01-03.01 Average number of hours spent per municipal solid waste facility capacity assessment

Explanatory Measures

01-01-03.01 Number of council of governments regions in the state with 10 or more years of disposal capacity

Goal 01, Objective 02

To review and process 90 percent of air, water, and waste authorization applications within established time frames.

Outcome Measures

01-02.01 Percent of air quality permit applications reviewed within established time frames
01-02.02 Percent of water quality permit applications reviewed within established time frames
01-02.03 Percent of water rights permit applications reviewed within established time frames
01-02.04 Percent of waste management permit applications reviewed within established time frames

01-02-01. Air Quality Permitting

Perform complete and timely reviews of applications to release pollutants into the air.

Output Measures

01-02-01.01 Number of state and federal new source review air quality permit applications reviewed
01-02-01.02 Number of federal air quality operating permits reviewed
01-02-01.03 Number of Emissions Banking and Trading transaction applications reviewed

Explanatory Measures

01-02-01.01 Number of state and federal air quality permits issued
01-02-01.02 Number of federal air quality permits issued

01-02-02. Water Resource Permitting

Perform complete and timely reviews of applications to utilize the state's water resources or to discharge to the state's waterways.

Output Measures

01-02-02.01 Number of applications to address water quality impacts reviewed

01-02-02.02 Number of applications to address water rights impacts reviewed
01-02-02.03 Number of concentrated animal feeding operation (CAFO) authorizations reviewed

Explanatory Measures
01-02-02.01 Number of water quality permits issued
01-02-02.02 Number of water rights permits issued

01-02-03. Waste Management and Permitting

Perform complete and timely reviews of applications relating to management and disposal of municipal and industrial solid and hazardous waste.

Output Measures
01-02-03.01 Number of new system waste evaluations conducted
01-02-03.02 Number of non-hazardous waste permit applications reviewed
01-02-03.03 Number of hazardous waste permit applications reviewed

Explanatory Measures
01-02-03.01 Number of non-hazardous waste permits issued
01-02-03.02 Number of hazardous waste permits issued
01-02-03.03 Number of corrective actions implemented by responsible parties for solid waste sites

01-02-04. Occupational Licensing

Establish and maintain occupational certification programs to ensure compliance with statutes and regulations that protect public health and the environment.

Output Measures
01-02-04.01 Number of applications for occupational licensing
01-02-04.02 Number of examinations administered
01-02-04.03 Number of licenses and registrations issued

Efficiency Measures
01-02-04.01 Average annualized cost per license and registration

Explanatory Measures
01-02-04.01 Number of TCEQ-licensed environmental professionals and registered companies

Goal 01, Objective 03

To ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.

01-03-01. Low-Level Radioactive Waste Management

Ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.

Output Measures
01-03-01.01 Number of radiological monitoring and verification samples of air, water, soil/sediment, and fauna collected

Explanatory Measures
01-03-01.01 Total annual amount of revenue deposited to the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive waste and other radioactive substances
01-03-01.02 Volume of low-level radioactive waste accepted by the State of Texas for disposal at the Texas Compact Waste Facility

Goal 02. Drinking Water and Water Utilities

To protect public health and the environment by assuring the delivery of safe drinking water to the citizens of Texas consistent with requirements in the Safe Drinking Water Act; by providing regulatory oversight of water and sewer utilities; and by promoting regional water strategies.

Goal 02, Objective 01

To supply 95 percent of Texans served by public drinking water systems with drinking water consistent

with requirements in the Safe Drinking Water Act. To provide regulatory oversight of water and sewer utilities and to promote regional water strategies.

Outcome Measures

02-01.01 Percent of Texas population served by public water systems which meet drinking-water standards

02-01.02 Percent of Texas population served by public water systems protected by a program which prevents connection between potable and non-potable water sources

02-01-01. Safe Drinking Water

Ensure the delivery of safe drinking water to all citizens through monitoring and oversight of drinking water sources consistent with the requirements of the Safe Drinking Water Act.

Output Measures

02-01-01.01 Number of public drinking water systems which meet primary drinking water standards

02-01-01.02 Number of drinking water samples collected

02-01-02. Water Utilities Oversight

Provide regulatory oversight of water and sewer utilities to ensure that charges to customers are necessary and cost-based; and to promote and ensure adequate customer service.

Output Measures

02-01-02.01 Number of utility rate reviews performed

02-01-02.02 Number of district applications processed

02-01-02.03 Number of certificates of convenience and necessity applications processed

Goal 03. Enforcement and Compliance Assistance

To protect public health and the environment by administering enforcement and environmental assistance programs that promote compliance with environmental laws and regulations, voluntary efforts to prevent pollution, and offer incentives for demonstrated environmental performance while providing strict, sure, and just enforcement when environmental laws are violated.

Goal 03, Objective 01

Through fiscal 2015, maintain at least 95 percent of all regulated facilities in compliance with state environmental laws and regulations, to respond appropriately to citizen inquiries and complaints and to achieve pollution prevention, resource conservation, and enhanced compliance.

Outcome Measures

03-01.01 Percent of inspected or investigated air sites in compliance

03-01.02 Percent of inspected or investigated water sites and facilities in compliance

03-01.03 Percent of inspected or investigated waste sites in compliance

03-01.04 Percent of identified noncompliant sites and facilities for which appropriate enforcement action is taken

03-01.05 Percent of investigated occupational licensees in compliance

03-01.06 Percent of administrative orders settled

03-01.07 Percent of administrative penalties collected

03-01-01. Field Inspections and Complaint Response

Promote compliance with environmental laws and regulations by conducting field inspections and responding to citizen complaints.

Output Measures

03-01-01.01 Number of inspections and investigations of air sites

03-01-01.02 Number of inspections and investigations of water rights sites

03-01-01.03 Number of inspections and investigations of water sites and facilities

03-01-01.04 Number of inspections and investigations of waste sites

Efficiency Measures

03-01-01.01 Average time (days) from air, water, or waste inspection to report completion

Explanatory Measures

03-01-01.01 Number of citizen complaints investigated
03-01-01.02 Number of emission events investigations
03-01-01.03 Number of spill cleanup inspections/investigations

03-01-02. Enforcement and Compliance Support

Maximize voluntary compliance with environmental laws and regulations by providing educational outreach and assistance to businesses and units of local governments; and assure compliance with environmental laws and regulations by taking swift, sure, and just enforcement actions to address violation situations.

Output Measures

03-01-02.01 Number of environmental laboratories accredited
03-01-02.02 Number of small businesses and local governments assisted

Efficiency Measures

03-01-02.01 Average number of days to file an initial settlement offer

Explanatory Measures

03-01-02.01 Amount of administrative penalties paid in final orders issued
03-01-02.02 Amount required to be paid for supplemental environmental projects issued in administrative orders
03-01-02.03 Number of administrative enforcement orders issued

03-01-03. Pollution Prevention and Recycling

Enhance environmental performance, pollution prevention, recycling, and innovative programs through technical assistance, public education, and innovative programs implementation.

Output Measures

03-01-03.01 Number of presentations, booths, and workshops conducted on pollution prevention/waste minimization and voluntary program participation
03-01-03.02 Number of quarts of used oil diverted from potential improper disposal

Explanatory Measures

03-01-03.01 Tons of hazardous waste reduced as a result of pollution prevention planning
03-01-03.02 Tons of waste collected by local and regional household hazardous waste collection programs
03-01-03.03 Number of registered waste tire facilities and transporters

Goal 04. Pollution Cleanup

To protect public health and the environment by identifying, assessing, and prioritizing contaminated sites, and by assuring timely and cost-effective cleanup based on good science and current risk factors.

Goal 04, Objective 01

By fiscal 2015, identify, assess, and remediate six additional Superfund sites and/or other sites contaminated by hazardous materials. To identify, assess, and remediate up to 92 percent of the known leaking petroleum storage tank sites.

Outcome Measures

04-01.01 Percent of leaking petroleum storage tank sites cleaned up
04-01.02 Total number of Superfund remedial actions completed
04-01.03 Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse
04-01.04 Percent of industrial solid and municipal hazardous waste facilities cleaned up

04-01-01. Storage Tank Administration and Cleanup

Regulate the installation and operation of underground storage tanks and administer a program to identify and remediate sites contaminated by leaking storage tanks.

Output Measures

04-01-01.01 Number of petroleum storage tank self certifications processed

04-01-01.02 Number of emergency response actions at petroleum storage tank sites

04-01-01.03 Number of petroleum storage tank cleanups completed

Efficiency Measures

04-01-01.01 Average time (days) to authorize a state lead contractor to perform corrective action activities

04-01-02. Hazardous Materials Cleanup

Aggressively pursue the investigation, design, and cleanup of federal and state Superfund sites, and facilitate voluntary cleanup activities at other sites and respond immediately to spills which threaten human health and the environment.

Output Measures

04-01-02.01 Number of Immediate Response Actions completed to protect human health and environment

04-01-02.02 Number of Superfund site assessments

04-01-02.03 Number of voluntary and brownfield cleanups completed

04-01-02.04 Number of Superfund sites in Texas undergoing evaluation and cleanup

04-01-02.05 Number of Superfund remedial actions completed

04-01-02.06 Number of Dry Cleaner Remediation Program (DCRP) site assessments initiated

04-01-02.07 Number of Dry Cleaner Remediation Program site cleanups completed

Efficiency Measures

04-01-02.01 Average time (days) to process Dry Cleaner Remediation Program applications

Explanatory Measures

04-01-02.01 Number of potential Superfund sites to be assessed

04-01-02.02 Number of state and federal Superfund sites

04-01-02.03 Total number of state and federal Superfund sites in post-closure care (O&M) phase

04-01-02.04 Number of Dry Cleaner Remediation (DCRP) eligible sites

Goal 05. Texas River Compacts

To ensure the delivery of Texas' equitable share of water.

Goal 05, Objective 01

Ensure the delivery of 100 percent of Texas' equitable share of water as apportioned by the River Compacts.

Outcome Measures

05-01.01 The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact

05-01.02 The percentage received of Texas' equitable share of quality water annually as apportioned by the Pecos River Compact

05-01.03 The percentage received of Texas' equitable share of quality water annually as apportioned by the Red River Compact

05-01.04 The percentage received of Texas' equitable share of quality water annually as apportioned by the Rio Grande Compact

05-01.05 The percentage received of Texas' equitable share of quality water annually as apportioned by the Sabine River Compact

05-01-01. Canadian River Compact

Prepare and resolve the annual accounting of water stored by each compact state.

05-01-02. Pecos River Compact

Prepare and resolve the annual accounting of water deliveries to Texas by New Mexico as apportioned by the Pecos River Compact and the U.S. Supreme Court decree.

05-01-03. Red River Compact

Develop and implement an annual accounting system of quality water deliveries to each compact state.

05-01-04. Rio Grande Compact

Prepare and resolve the annual accounting of water deliveries to Texas by Colorado and New Mexico as apportioned by the Rio Grande Compact.

05-01-05. Sabine River Compact

Prepare and resolve the annual accounting of water diversions by Texas and Louisiana as apportioned by the Sabine River Compact.

Part V
Technology Resource Planning

TECHNOLOGY ASSESSMENT SUMMARY *141*

TECHNOLOGY INITIATIVE ASSESSMENT AND ALIGNMENT *143*

Technology Assessment Summary

This "Technology Assessment Summary" details the policies and technology directions at the TCEQ that correspond to ten statewide information technology priorities articulated by the Texas Department of Information Resources (DIR) in the *2012–2016 State Strategic Plan for Information Resources Management*. The ten priorities are Cloud, Data Management, Data Sharing, Infrastructure, Legacy Applications, Mobility, Network, Open Data, Security and Privacy, and Social Media.

Goal 1. Cloud Solutions

Texas government will evaluate, and adopt as appropriate, cloud computing solutions to drive cost-effective and efficient operations.

- The TCEQ is implementing Microsoft Outlook and Exchange as its electronic mail solution, hosted by Microsoft in a cloud implementation.
- The agency has also been evaluating Microsoft SharePoint in a cloud implementation as an internal collaboration tool.
- The principal reason for adopting cloud implementation in these cases is to reduce costs while gaining deployment flexibility and increasing disaster-recovery options.
- The agency is also evaluating cloud-based storage options for geospatial data.

Goal 2. Data Management

Texas government must implement sound data-management principles to support good business practices, meet regulatory requirements, and reduce costs.

- The agency's most recent Information Strategic Plan recommends that the agency implement an enterprise content-management system as one of its major technology initiatives. The agency is researching enterprise content management to address multiple issues regarding records management, business process management, collaboration, and public information.

Goal 3. Data Sharing

Texas agencies with common business practices and trading partners should examine opportunities to electronically share information and data to improve operational efficiency.

- The TCEQ has implemented modular systems to accept various information flows electronically from the regulated community. It has proven to be relatively easy to add new types of data flows and new transaction types to these systems due to their modular, extensible designs.
- The agency participates in a cooperative disaster response management system called Response Manager along with the U.S. Environmental Protection Agency (EPA) Region 6, the Texas General Land Office, and the United States Coast Guard. Hosted by an EPA contractor, the system integrates data concerning an emergency situation collected by any of the responders, and makes it quickly available to all to guide further response planning.
- The agency routinely shares GIS data–including base map layers, aerial and satellite imagery, and other products–with federal, state, and local entities. The Texas Geographic Information Council sets standards facilitating data exchanges and includes a voting member from the TCEQ.
- The agency participates in the National Environmental Information Exchange Network (NEIEN) with the EPA and other state and local environmental agencies. This is a web-services-based exchange of environmental information using XML for standard definitions of the data structures transmitted. Our implementation is called the Texas Integrated Data Exchange Node (TIDEN).

Goal 4. Technology Infrastructure

Texas government will continue to consolidate and standardize its technology infrastructure to reduce operational costs and improve service delivery.

- The TCEQ has had good success using the capabilities provided first by Texas Online and now by Texas.gov, to process payments from

regulated entities securely. The TCEQ has a member on the Texas.gov Customer Advisory Council, and will continue to look for additional services that would benefit the agency.

- The TCEQ uses the statewide data network to the extent possible, and has found it effective.
- The TCEQ is making progress on an initiative to reduce middleware environments from two to one, which will reduce server instances and operating costs.
- While the data-center consolidation has limited the agency's infrastructure capabilities and substantially increased its costs, we remain hopeful that the recently-completed re-procurement will eventually enable the agency to obtain some of the benefits of consolidation.

Goal 5. Legacy Applications

Texas government will identify existing legacy applications and prioritize their replacement or modernization.

A Technical Architecture Committee functions as a standing subcommittee of the Information Technology Work Group and publishes both current and planned architecture guidance. The agency's primary software platforms for major new application systems include:

- Java, ColdFusion (programming languages)
- Oracle (database platform)

In keeping with the agency's long-range plans to move legacy applications from Ingres 4GL and Open Road, Paradox, and Lotus Notes:

- The first of three Permitting and Registration Information System (PARIS) components, supporting Industrial Hazardous Waste business functions, is complete. The remaining two, supporting Petroleum Storage Tank and Water Quality Permitting functions, are scheduled for completion by August 2013. This system implements the last remaining functions in TRACS, moving the agency out of Ingres 4GL and Open Road.
- An internal project is setting priorities among the agency's legacy Paradox applications, and replacing the critical ones using Oracle or Access as appropriate.
- An agency team is analyzing the first of three legacy applications implemented in Lotus Notes. These will likely be replaced using Cold Fusion and Oracle.

Goal 6. Mobility

Texas government must address the needs of an increasingly mobile citizen and workforce population.

- Using the agency's web content management system, we have implemented a version of our main external website that is accessible to mobile devices such as smartphones and tablets.
- The agency has established a YouTube channel to disseminate information to the public using video.

Goal 7. Network Services

Texas government should enhance network services throughout the state to deliver the most efficient and cost-effective technology.

The TCEQ is evaluating voice-over-Internet-protocol (VOIP) technology to reduce costs in voice communications statewide.

Goal 8. Open Data

Texas agencies will post high-value public data on their websites to increase government transparency and accountability.

The TCEQ posts a wide variety of data on its website, including reports drawn from agency databases, ad hoc reporting capabilities responding to specific citizen requests, and GIS applications displaying agency data as a map.

- The agency maintains a reporting service (239-DATA) offering on-request reports from agency databases.
- The agency has a number of data search and reporting tools available on its public website, with both text-based and map-based interfaces.
- The Central Registry search tool links permit-related datasets, allowing users to find diverse permit-related information in a single source.
- The public website provides both access to the background material for items on the

commission's agenda, and a means to comment on upcoming commission issues. Several types of decisions issued by the commission and by the executive director are also available online, and more are being added.

- The agency's Information Strategic Plan recommends major enhancements to this functionality under the titles "Enterprise Information Gateway," "Enterprise Geographic Information System," and "Enterprise Content Management System."

Goal 9

Texas government must secure its technology infrastructure, ensure the integrity of its online services, and protect the private information collected from citizens and business.

- The TCEQ maintains a robust, multilayered security capability, including firewalls, an intrusion detection and prevention system (IDS and IPS), and applications for Web blocking and virus protection. We perform continual software upgrades and patches, and maintain current profiles for viruses and other malware.
- The DIR conducts annual vulnerability assessments of TCEQ systems using controlled penetration tests. These assessments guide the agency's repair and remediation efforts.
- The TCEQ is implementing additional control measures intended to protect against deliberate cyber-attacks, including an encryption capability to protect private information in case of a security breach, tests of its ability to restore both data and system configurations from backups, and additional control policies for the IDS and IPS mentioned above.
- The TCEQ recently conducted an information security risk assessment with the assistance of an outside contractor. The risk assessment will be repeated periodically.
- Agency databases that may contain personally identifiable information, or information marked confidential by submitters in the regulated community, include appropriate controls on access to the information.

Goal 10

Texas agencies should evaluate opportunities to better engage citizens through social media and other Web 2.0 technologies.

The agency has a policy governing the use of social media for official agency business. In addition to its more traditional Web and e-mail communications, the agency publishes video presentations on You Tube.

Technology Initiative Assessment and Alignment

The Technology Initiative Assessment and Alignment is the strategic alignment of technology initiatives with agency business needs and priorities. Technology alignment with agency business needs is demonstrated by identifying technology initiatives, both current and planned, in the context of agency objectives. The following table identifies and describes agency technology initiatives as they relate to agency objectives.

Table 9. Alignment of Agency Technology Initiatives with Agency Objectives and Statewide Technology Priorities and Guiding Principles

Enterprise E-Commerce	
Description	An extensible system for exchanging information with the regulated community, including monitoring reports and transactions such as permit applications and fees. The existing reusable modules will be expanded upon.
Associated Projects	None

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Table 9. Alignment of Agency Technology Initiatives with Agency Objectives and Statewide Technology Priorities and Guiding Principles (continued)

Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	*Infrastructure*. Payment services are provided by Texas.gov.
Guiding Principles	*Connect*. These applications make applying for permits and licenses, submitting required reports, and paying fees easier and cheaper for the regulated community.
Anticipated Benefits	Reduce costs and processing times for many types of interactions with the regulated community. Benefits would accrue both to the agency and to the participating regulated entities.
Capabilities or Barriers	The modular design of these applications reduces the effort and risk of adding new types of transactions.

Strengthen Emergency Response Capabilities	
Description	Improve the agency's business-continuity planning, and disseminate it throughout the agency. Remove geographical barriers to access to agency systems and information.
Associated Projects	None
Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	*Data sharing*. Provide information to other emergency response organizations. *Mobility*. Provide information and communications capability at the sites of emergencies. *Network*. Provide communications capability at the sites of emergencies, for both the TCEQ and other emergency response organizations.
Guiding Principles	*Innovate*. Provide information and communications capabilities across responding organizations at the sites of emergencies. *Deliver*. Enable data analysis, reporting, mapping, and communications for workers at the sites of emergencies.
Anticipated Benefits	Improve service to the public, the regulated community, and other emergency response organizations during natural disasters and industrial accidents. Improve the agency's ability to continue to provide services when disasters affect agency installations or personnel.
Capabilities or Barriers	The TCEQ has extensive experience and a substantial infrastructure investment in emergency response capability. TCEQ resources have proved invaluable in a number of emergencies across the state.

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Table 9. Alignment of Agency Technology Initiatives with Agency Objectives and Statewide Technology Priorities and Guiding Principles (continued)

Enterprise Information Gateway/Integrated Web Reporting	
Description	Integrated structure for access to agency data, built upon the current Integrated Web Reporting foundation, and extended to all major information systems. With appropriate security controls, will be accessible both to internal and external users.
Associated Projects	None
Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	*Data Management*. The plan includes cataloging agency data sources, reducing duplication, and improving data quality. *Data Sharing*. A central catalog and source for data will simplify and therefore facilitate the process of providing data to other organizations. *Open Data*. Eases public access to data by consolidating more types of data in a single portal, reducing what citizens need to know about the agency's programs before they can locate the data they want.
Guiding Principles	*Connect*. Eases public access to agency data. *Build Trust*. Opens more types of agency information to easy public access. *Deliver*. Reduces the effort agency personnel must expend to access agency data, and improves its quality.
Anticipated Benefits	Reduce duplication of agency data and of data-management activities. Speed up regulatory and environmental decisions by providing a single reliable source for information. Meet the needs of many more external stakeholders for agency information.
Capabilities or Barriers	The TCEQ has extensive capabilities for public access to data, both through the Web and through the TCEQ Data Clearinghouse. The TCEQ also has implemented the Central Registry, a database containing the core data concerning the entities the TCEQ regulates. There remain differences between data models used by agency programs that will have to be reconciled before the full benefit of data integration can be achieved.

Enterprise Content Management System	
Description	A comprehensive, indexed repository for agency documents, and an electronic pathway for agency business processes. It will be integrated with the Enterprise Information Gateway and the Enterprise GIS.
Associated Projects	Records Management and Imaging

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Table 9. Alignment of Agency Technology Initiatives with Agency Objectives and Statewide Technology Priorities and Guiding Principles (continued)

Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	*Data Management,* Improved management of agency documents. *Open Data*. Improved speed and reliability of the agency's searching and reporting of agency information.
Guiding Principles	*Build Trust*. Public access to agency information will be made quicker and more reliable. *Deliver*. Agency business processes will be more efficient.
Anticipated Benefits	Reduce costs and environmental impact of paper-based agency processes. Improve the accuracy of agency information. Greatly improve the speed and reliability of access to agency information, including public-information requests.
Capabilities or Barriers	Comprehensive imaging and document-management projects are risky, and have often failed. The agency's filing systems and central file room are costly and overflowing. The project will proceed in a series of modest steps to reduce risk and begin gaining some benefit early.

Enterprise Geographic Information System	
Description	A geographic, map-based interface to agency information, extended from current GIS systems. It will be integrated with the Enterprise Information Gateway and the Enterprise Content Management System. In addition to maps, it will provide database records and regulatory documents related to regions on the earth.
Associated Projects	None
Agency Objectives	01-01, 01-02, 01-03, 02-01, 03-01, 04-01
Statewide Technology Priorities	*Cloud*. The agency is investigating cloud-based storage services for GIS data. *Open Data*. The map interface to agency data will allow more people to find environmental and regulatory data for geographical areas where they have an interest, and to relate multiple sources of data about those areas.
Guiding Principles	*Connect*. Public access to, and analysis of, agency data will be improved. *Deliver*. Agency personnel will also be able to use geographical data more easily.
Anticipated Benefits	Improve environmental planning and increase the effectiveness of regulation by relating many types of information that affect environmental decisions. Increase the value of agency data to state and local leadership, industry, and the public, by associating it with geographical regions.
Capabilities or Barriers	The agency has extensive experience providing map-based access to data, and has won awards for GIS applications.

Appendices

A. AGENCY PLANNING PROCESS *149*

B. TCEQ ORGANIZATIONAL CHART *151*

C. OUTCOME PROJECTIONS, FYs 2013–2017 *153*

D. TCEQ PERFORMANCE MEASURES AND DEFINITIONS *157*

E. TCEQ WORKFORCE PLAN, FYs 2013–2017 *217*
Key Factors Facing the Agency | Current Workforce Profile (Supply Analysis)
Future Workforce Profile (Demand Analysis) | Gap Analysis | Strategy Development

F. TCEQ SURVEY OF EMPLOYEE ENGAGEMENT, 2011 *231*
Agency Participation | Areas of Strength | Areas of Concern
Climate Analysis | Next Steps: Interpretation and Intervention

A P P E N D I X A

Agency Planning Process

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

In accordance with the TCEQ's mission, the agency has established five goals and seven quantifiable objectives for its strategic plan for fiscal years 2013–2017. These goals and objectives reflect the priorities and the environmental improvements that the agency expects to make within this time frame.

Based on recommendations by the Sunset Advisory Commission, the 82nd Texas Legislature continued the functions and operations of the TCEQ for another twelve years. The overall purpose of the Sunset Advisory Commission's review was to: (1) assess the need to retain the agency, (2) look for potential duplication of programs within our and other state agencies, and (3) consider changes to improve the agency. No changes were made to the overall goals and objectives of the agency.

Planning Goals

Beginning with fiscal years 2014–2015, the five goals for the TCEQ are:

1. **Assessment, planning, and permitting**
   - Plan for air quality, water quality, and waste management by: developing the State Implementation Plan for attainment of the National Ambient Air Quality Standards, designing and implementing specific strategies to improve water quality, and analyzing solid waste generation and management in Texas.
   - Implement 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.
2. **Drinking water and water utilities**
   - Ensure that Texans served by public drinking water systems have drinking water that is consistent with the requirements in the Safe Drinking Water Act.
   - Set water rates and allocate surface water rights.
3. **Enforcement and compliance assistance**
   - Ensure 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.
4. **Pollution cleanup**
   - Develop plans for the cleanup and eventual reclamation of contaminated industrial and abandoned hazardous waste sites, and for the restoration of air and water quality.
5. **Texas river compacts**
   - Ensure that Texas receives its equitable share of water.

Planning Objectives

To achieve the mission and goals of the agency, the TCEQ has adopted seven planning objectives to protect the health and human welfare of our citizens, and to promote clean industrial and business development in Texas. The seven planning objectives are:

1. To decrease the amount of toxic chemicals released into the environment via air, water, and waste pollutants by at least 2 percent as measured by comparing the most recent Toxic Release Inventory (TRI) values to the previous reported TRI reporting-year values.
2. To review and process 90 percent of air, water, and waste authorization applications within the established time frames.
3. To ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.

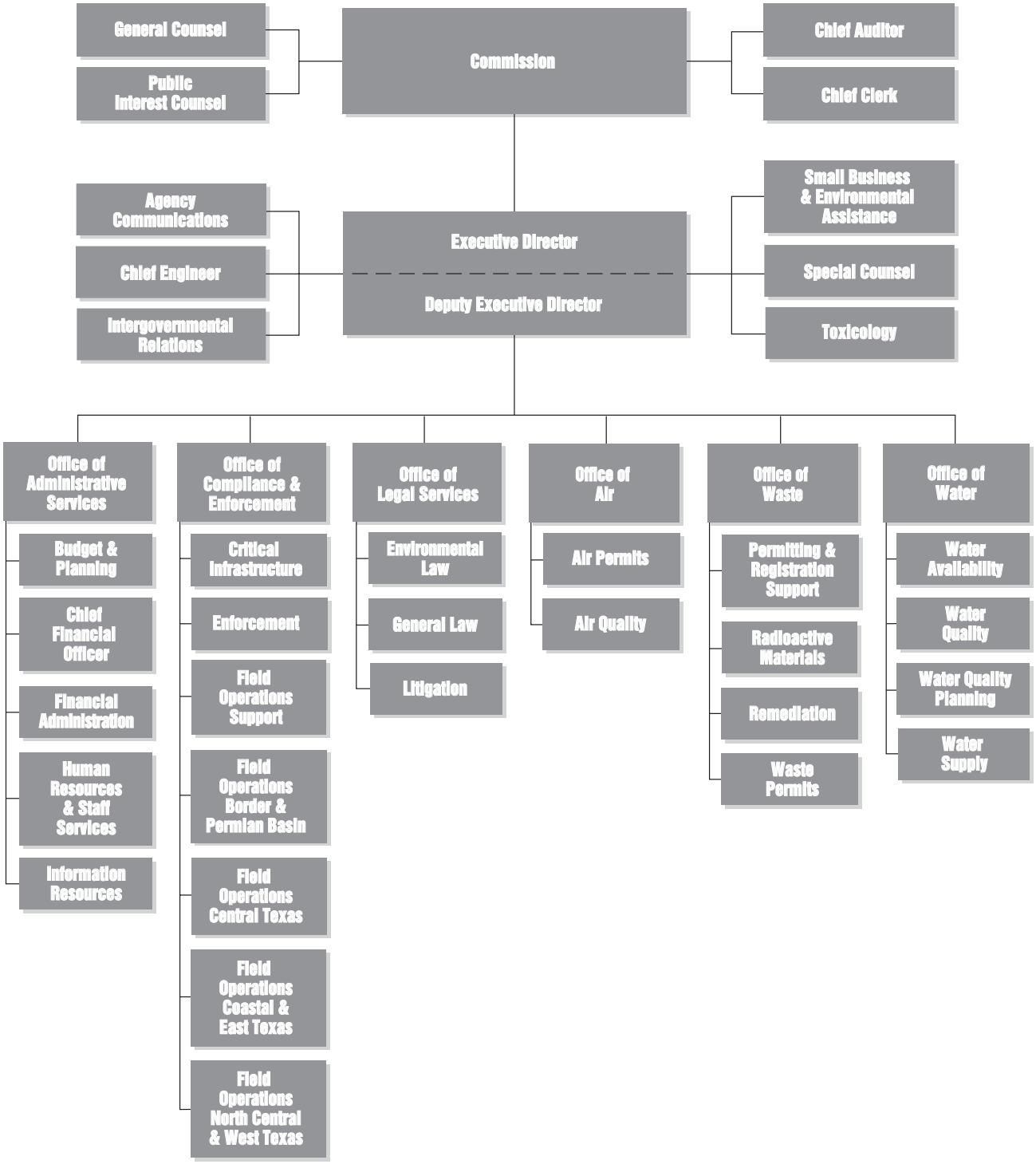
4. To supply 95 percent of Texans served by public drinking water systems with drinking water consistent with the requirements in the Safe Drinking Water Act. To provide regulatory oversight of water and sewer utilities and to promote regional water strategies.
5. Through fiscal 2015, to maintain at least 95 percent of all regulated facilities in compliance with state environmental laws and regulations; to respond appropriately to citizen inquiries and complaints; and to achieve pollution prevention, resource conservation, and enhanced compliance.
6. By fiscal 2015, to identify, assess, and remediate six additional Superfund sites or other sites contaminated by hazardous materials, and up to 92 percent of the leaking petroleum storage tank sites.
7. To ensure the delivery of 100 percent of Texas' equitable share of water as apportioned by the river compacts.

Planning Process

The Strategic Plan is developed with the support of the TCEQ commissioners and executive management to ensure that agency policies address appropriate environmental protection and provide a cost-effective process to meet agency goals and objectives. Each agency office provides input into the external and internal assessment that is used to develop and maintain the goals, objectives, and strategies contained in this plan. Additionally, by improving and reporting on agency performance measures as accurately as possible, the TCEQ Strategic Plan is designed to communicate agency progress on efforts to ensure that all Texans are living in a safe environment.

A P P E N D I X B

TCEQ Organizational Chart



Outcome Projections, Fiscal Years 2013–2017

Goal/ Objective	Outcome Measures	Office	2012 Targeted	2013 Projected	2014 Projected	2015 Projected	2016 Projected
01-01.01	Annual percent of stationary and mobile source pollution reductions in nonattainment areas	Air	3%	3%	3%	3%	3%
01-01.02	Nitrogen oxides (NO_x) emissions reduced through the Texas Emissions Reduction Plan (TERP)	Air	68.4 tpd	62.49 tpd	58.31 tpd	53.97 tpd	46.38 tpd
01-01.03	Percent of Texans living where the air meets federal Air Quality Standards	Air	35%	35%	47%	46%	44%
01-01.04	Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state	Water	0.1%	0.1%	0.1%	0.1%	0.1%
01-01.05	Percent of Texas classified surface waters meeting or exceeding water quality standards	Water	63.8%	63.8%	63.8%	63.8%	63.8%
01-01.06	Annual percent of solid waste diverted from municipal solid waste disposal facilities	Waste	4%	4%	4%	4%	4%
01-01.07	Annual percent decrease in the toxic releases in Texas	Toxicology	2%	2%	2%	2%	2%
01-01.08	Annual percent decrease in the amount of municipal solid waste going into landfills	Waste	-2%	-2%	-2%	-2%	-2%
01-01.09	Percent of high- and significant-hazard dams inspected within the last five years	Compliance & Enforcement	100%	96%	96%	96%	99%
01-01.10	Number of acres of habitat created, restored, and protected through implementation of estuary action plans	Water	2,000	2,000	2,000	2,000	2,000
01-02.01	Percent of air quality permit applications reviewed within established time frames	Air	90%	90%	90%	90%	90%
01-02.02	Percent of water quality permit applications reviewed within established time frames	Water	90%	90%	90%	90%	90%
01-02.03	Percent of water rights permit applications reviewed within established time frames	Water	75%	75%	75%	75%	75%
01-02.04	Percent of waste management permit applications reviewed within established time frames	Waste	90%	90%	90%	90%	90%

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Outcome Projections, Fiscal Years 2013–2017 (continued)

Goal/ Objective	Outcome Measures	Office	2012 Targeted	2013 Projected	2014 Projected	2015 Projected	2016 Projected
02-01.01	Percentage of Texas population served by public water systems that meet drinking water standards	Water	93%	93%	93%	93%	93%
02-01.02	Percent of Texas population served by public water systems protected by a program that prevents connection between potable and non-potable water sources	Water	95%	95%	95%	95%	95%
03-01.01	Percent of inspected or investigated air sites in compliance	Compliance & Enforcement	98%	98%	98%	98%	98%
03-01.02	Percent of inspected or investigated water sites and facilities in compliance	Compliance & Enforcement	97%	97%	97%	97%	97%
03-01.03	Percent of inspected or investigated waste sites in compliance	Compliance & Enforcement	97%	97%	97%	97%	97%
03-01.04	Percent of identified noncompliant sites and facilities for which timely and appropriate enforcement action is taken	Compliance & Enforcement	85%	85%	85%	85%	85%
03-01.05	Percent of investigated occupational licensees in compliance	Compliance & Enforcement	82%	82%	82%	82%	82%
03-01.06	Percent of administrative orders settled	Compliance & Enforcement	85%	85%	85%	85%	85%
03-01.07	Percent of administrative penalties collected	Compliance & Enforcement	75%	80%	80%	80%	80%
04-01.01	Percent of leaking petroleum storage tank sites cleaned up	Waste	88%	88%	92%	92%	92%
04-01.02	Total number of Superfund remedial actions completed	Waste	111	113	116	119	122
04-01.03	Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse	Waste	70%	70%	70%	70%	70%
04-01.04	Percent of industrial solid and municipal hazardous waste facilities cleaned up	Waste	62%	62%	63%	63%	63%

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Outcome Projections, Fiscal Years 2013–2017 (continued)

Goal/ Objective	Outcome Measures	Office	2012 Targeted	2013 Projected	2014 Projected	2015 Projected	2016 Projected
05-01.01	The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact	Water	100%	100%	100%	100%	100%
05-01.02	The percentage received of Texas' equitable share of quality water annually as apportioned by the Pecos River Compact	Water	100%	100%	100%	100%	100%
05-01.03	The percentage received of Texas' equitable share of quality water annually as apportioned by the Red River Compact	Water	100%	100%	100%	100%	100%
05-01.04	The percentage received of Texas' equitable share of quality water annually as apportioned by the Rio Grande Compact	Water	100%	100%	100%	100%	100%
05-01.05	The percentage received of Texas' equitable share of quality water annually as apportioned by the Sabine River Compact	Water	100%	100%	100%	100%	100%

A P P E N D I X D

TCEQ Performance Measures and Definitions, Fiscal Year 2014

At the time of this printing, these performance measures and definitions had not received formal approval from the Legislative Budget Board or the Governor's Office of Budget, Planning, and Policy.

The State of Texas uses a set of organized procedures known as the Strategic Planning and Budgeting System, in which funding and other decisions are based upon what an agency is *accomplishing*, rather than just what it is doing. As an important element of the monitoring phase of budgeting, *performance measures* serve as specific targets that indicate the level of success attained in accomplishing agency goals.

Performance Measures

There are four types of performance measures, as follows:

1. **Outcome Measures**–are used to assess an agency's effectiveness in serving its customers and in achieving its mission and goals. An outcome measure is typically expressed as a percentage, rate, or ratio.

2. **Output Measures**–are used to count the services and goods produced by an agency. They are helpful in assessing agency workload and demand for services as well as agency efforts to address those demands. The number of people receiving a service and the number of services delivered are often used as measures of output.

3. **Explanatory Measures**–reflect the agency's operating environment and explain factors that are relevant to the interpretation of other agency measures.

4. **Efficiency Measures**–are used to quantify costs, unit cost, or productivity associated with a given outcome or output.

Measure Definitions

The definition of a performance measure follows a format prescribed by the Texas Legislative Budget Board. This format has eight components, as follows:

1. **Short Definition**–provides a brief explanation of the measure, with enough detail to give a general understanding of it.

2. **Purpose/Importance**–describes the intended purpose of the measure and its significance.

3. **Source/Collection Data**–describes the source of the data or information and how it is collected.

4. **Method of Calculation**–clearly specifies how the measure is calculated.

5. **Data Limitations**–identifies any limitations and factors beyond the control of the agency that may affect reported performance.

6. **Calculation Type**–specifies whether the information is cumulative or non-cumulative from quarter to quarter.

7. **New Measure**–identifies whether the measure is new or has been significantly changed.

8. **Desired Performance**–clarifies whether the optimal level of performance is above, near, or below projections.

Performance Measures and Definitions

The following is a listing of the TCEQ's performance measures and their definitions for fiscal 2014.

Outcome 01-01.01 Annual percent of stationary- and mobile-source pollution reductions in nonattainment areas

Short Definition: This measure quantifies changes in criteria pollutants or precursors for criteria pollutants for which the area has failed to meet a national standard from sources within nonattainment areas.

Purpose/Importance: The measure reflects trends of criteria emissions in the nonattainment areas showing pollution changes in areas that have failed to meet national emission standards. These changes are potential indicators of strategies put in place to reduce emissions which will result in meeting attainment status.

Source/Collection of Data: The sources of data include the annual inventory of major stationary point sources and the inventory of minor point sources and mobile sources that occurs every three years.

Method of Calculation: This measure is calculated by subtracting emissions data totals of the most recent emissions inventory from the total emissions figures of the previous year, divided by a base year emissions according to pollutant type. This measure is calculated on a calendar year (Jan. 1 through Dec. 31) basis because data cannot be quality-assured in a timely manner so that it is available on a fiscal-year basis.

Data Limitations: The lack of consistency between the current methods of conducting emissions inventories for major stationary point and minor stationary point and mobile emissions results in the inability to compile detailed annual trend analyses.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.02 Nitrogen oxides (NO_x) emissions reduced through the Texas Emissions Reduction Plan (TERP)

Short Definition: This measure is intended to show the amount of NO_x emissions reduced through implementation of the TERP incentive grants for cleaner on- and off-road heavy-duty engines.

Purpose/Importance: The TERP program was established by the 77th Legislature (Senate Bill 5) to offset emission reductions required of construction equipment operation and required accelerated purchase of cleaner diesel engines by providing incentives purchase or retrofit of cleaner on- and off-road diesel engines.

Source/Collection of Data: Emissions reduced is the difference between emissions estimated for current equipment and emissions from new purchase or retrofit equipment as reported by grant recipients over the life of the projects.

Method of Calculation: Tons per year NO_x reduced is generated by totaling the annual emissions reduction reported by each grant recipient. That number is divided by an estimated number of days in an operational year: either 250 or 365 days, depending on the type of project. The final amount is expressed as tons-per-day reductions.

Data Limitations: None identified; grant recipients are required to report emissions reduced by the funded projects.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.03 Percent of Texans living where the air meets federal Air Quality Standards

Short Definition: Percent of Texans living where the air meets federal Air Quality Standards.

Purpose/Importance: This measure reflects compliance with federal Air Quality Standards.

Source/Collection of Data: Population in counties in metropolitan areas that exceed federal air quality standards.

Method of Calculation: The percentage of Texas population in areas meeting federal clean air standards is measured by identifying the population within the counties in which the federal standards are being exceeded and subtracting this population figure from the statewide total population figure. This number is then divided by the total population and multiplied by 100 to derive a percentage. Population for Texas and Texas counties are taken from the most recent yearly population estimates released by the Texas State Data Center. This measure is calculated on a calendar year (Jan. 1 through Dec. 31) basis because data cannot be quality-assured in a timely manner so that it is available on a fiscal-year basis.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.04 Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state

Short Definition: Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state.

Purpose/Importance: This measure reflects the reduction in the pollution load from all facilities discharging to the waters of the state.

Source/Collection of Data: Using a TCEQ database maintained by the Water Quality Division, staff will report the total permitted pounds per day of the Five Day Biochemical Oxygen Demand (BOD5) or the Five Day Carbonaceous Biochemical Oxygen Demand (CBOD5) and the total permitted flow for the month of June of each year.

Method of Calculation: The total permitted pollution load from all facilities discharging to the waters of the state will be divided by the total permitted discharge flow to the waters of the state. The permitted pollution load will be subtracted from the previous year's permitted pollution load divided by the previous year's permitted pollution load, and multiplied by 100 to determine the percent reduction from the previous year.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.05 Percent of Texas classified surface waters meeting or exceeding water quality standards

Short Definition: Percent of Texas classified surface water meeting or exceeding water quality standards.

Purpose/Importance: This is a measure of the agency's success in developing and implementing state water quality management programs. The Texas Surface Water Quality Standards establish goals for water quality in the surface waters of Texas. The extent to which water quality standards are attained is an environmental measure of water quality in Texas rivers, reservoirs, and estuaries, as well as a reflection of monitoring intensity.

Source/Collection of Data: The Surface Water Quality Information System Database has summary information on the water quality status for water bodies in Texas. The information is generated by comparing water sampling data collected by the agency and its cooperators with criteria for the classified water bodies established in the Texas Surface Water Quality Standards (30 TAC 307). Classified water bodies are the larger water bodies in Texas, and their watersheds are the focus of water quality management efforts. There are approximately 375 classified water bodies in Appendix A. Standards attainment is reported in TCEQ's Texas Integrated Report for Clean Water Act, sections 305(b) and 303(d).

Method of Calculation: Summary totals reported in the Integrated Report express separately the percent of waters meeting water quality standards for rivers, reservoirs, and estuaries. For this calculation, the percent meeting or exceeding standards = "amount meeting" / "total amount assessed" times 100; where "total amount assessed" = "amount meeting" + "amount not meeting". The amount is expressed as miles for rivers, acres for reservoirs, and square miles for estuaries. The overall percent of waters meeting standards for the state is then calculated as (% of rivers meeting standards + % of reservoirs meeting standards + % of estuaries meeting standards)/3.

Data Limitations: The Integrated Report is prepared in even years and staff is directed by the Commission to submit a draft document to the EPA for approval. This draft document is posted on the agency website and used for reporting and planning purposes as the "Commission-approved draft." Compliance with water quality standards is based on the most recent sampling data typically for a period of seven years. The assessment integrates natural variability in water quality, and overall change in this measure, reflecting actual conditions, is relatively slow. Because the Integrated Report is updated only every two years, this measure remains constant for two years. If the EPA changes the requirement for the Integrated Report to a period other than every two years, the measure will also remain constant for that period of time.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Outcome 01-01.06 Annual percent of solid waste diverted from municipal solid waste disposal facilities

Short Definition: The annual percent of solid waste diverted from municipal solid waste disposal facilities in the state.

Purpose/Importance: To provide a general indicator of the effectiveness of statewide solid waste diversion and planning efforts.

Source/Collection of Data: Waste diversion data is obtained from the annual reporting program for municipal solid waste landfills.

Method of Calculation: The percent diverted is determined by the formula: total amount diverted / (total amount diverted + total amount disposed) × 100.

Data Limitations: This measure only captures data for solid waste that arrives at a landfill and is then diverted. It does not capture data for solid waste that is diverted before it gets to the landfill, such as local recycling programs. Economic factors and natural disasters are important but are not currently considered in the calculation. In addition, much of the waste disposal in the state is determined by volume estimates instead of through actual scale weight.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Outcome 01-01.07 Annual percent decrease in the toxic releases in Texas

Short Definition: Annual percent decrease in the toxic releases in Texas.

Purpose/Importance: This measure reflects industry efforts to make reductions in their toxic releases.

Source/Collection of Data: Using the adjusted data reported in the annual Toxic Release Inventory, the amount of toxic releases during the reporting period, to air, land, and water will be subtracted from the previous year's level, and this difference will be divided by the previous year's level and multiplied by 100 to calculate the percent reduction.

Method of Calculation: Using the adjusted data reported in the annual Toxic Release Inventory, the amount of toxic releases during the reporting period, to air, land, and water will be subtracted from the previous year's level, and this difference will be divided by the previous year's level and multiplied by 100 to calculate the percent reduction.

Data Limitations: Data depends on the timely retrieval of information from the Toxic Release Inventory maintained by the EPA.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Outcome 01-01.08 Annual percent decrease in the amount of municipal solid waste going into Texas landfills

Short Definition: Annual percent decrease in the amount of municipal solid waste going into Texas landfills.

Purpose/Importance: This measure reflects recycling and conservation efforts to reduce the amount of solid waste going into Texas landfills.

Source/Collection of Data: The disposal amount in tons is based on the most current set of complete data obtained through annual reports required for all permitted MSW facilities.

Method of Calculation: The percent decrease in the amount of MSW going into Texas landfills will be computed by subtracting the amount in tons for the reporting period from the amount in tons for the previous year. This difference will then be divided by the amount in tons for the previous year and multiplied by 100 to determine the percent decrease.

Data Limitations: Due to the continued growth in population in the state, there will more than likely not be a decrease in municipal solid waste going to landfills despite the best efforts to encourage recycling and reuse for some time to come.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Outcome 01-01.09 Percent of high- and significant-hazard dams inspected within the last five years

Short Definition: Percent of high- and significant-hazard dams that have had safety inspections performed within the last five years. Inspections include on-site investigations as well as in-house review of owner's engineer and contractor's inspection reports involving high- and significant-hazard dams.

Purpose/Importance: The inspections are conducted to ensure the safe design, construction, maintenance, repair, and removal of dams in the state. The percent of inspections conducted on high- and significant-hazard dams allows a comparison of state performance to federal program recommendations of inspections every five years.

Source/Collection: Dam Safety Investigation staff enter investigation information into the Dam Safety Module, which interfaces with several TCEQ databases, including CCEDS.

Method of Calculation: Using information obtained by running queries of the data in CCEDS, performance is calculated using the following formula: (number of high- and significant-risk dams that have been inspected within the last five years / total number of high- and significant-risk dams) × 100.

Data Limitations: None.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.10 Number of acres of habitat created, restored, and protected through implementation of estuary action plans

Short Definition: Number of acres of habitat created, restored, and/or protected through implementation of Galveston Bay Estuary Program (GBEP) and Coastal Bend Bay Estuary Program (CBBEP) estuary action plans.

Purpose/Importance: Loss of habitat is one of the greatest threats facing the health of the Coastal Bend and Galveston Bay estuaries, designated by the EPA as estuaries of national significance. Habitat restoration and protection is critical for protecting significant fish and wildlife communities. Conservation areas, including wetlands, function to maintain water quality in the estuaries and surrounding tributaries. This measure must be reported by the estuary programs to the EPA and would be used in the future to express success of the Texas Coastal Management Program.

Source/Collection of Data: GBEP and CBBEP initiate and track habitat restoration projects within their established boundaries. These projects will be manually calculated for each program, added together, and reported by the Office of Water's Water Quality Planning Division.

Method of Calculation: Annual measure is determined by computing the area of habitat restored, created, or protected using aerial photography. Habitat types include tidal flats, inter-tidal marsh, freshwater and forested wetland, bird-nesting islands, coastal prairie, riparian, oyster reefs, and submerged aquatic vegetation. The measure is expressed in acres, inclusive of both wetland and upland areas.

Data Limitations: Actual acreage gained is influenced by changes in cost of land, availability of dredge material, changes in fuel cost, weather and partner monetary and in-kind contributions. Individual projections by GBEP and CBBEP will consider differences in land cost in the two geographical areas.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.01 Number of point-source air quality assessments

Short Definition: The number of industrial point-source emissions inventories containing National Ambient Air Quality Standards (NAAQS) criteria and toxic pollutants that are evaluated and entered into the State of Texas Air Reporting System (STARS) database.

Purpose/Importance: The measure reflects the number of emissions inventories submitted from industrial point sources in Texas and entered into the STARS database. The emissions inventory data are used for planning activities such as State Implementation Plans and are submitted to the EPA as required in the federal Clean Air Act of 1990 and they are also used for permit modeling, emissions fee verification, and compliance and enforcement activities.

Source/Collection of Data: Data are collected through point-source emissions inventories that are submitted annually to the Commission by entities that are subject to the emissions inventory reporting requirements.

Method of Calculation: The count of sources is based on the number of emissions inventories that are quality assured and entered into the STARS or other electronic database during each quarter of the fiscal year.

Data Limitations: Data is affected by the number of non-attainment areas in the state or by the NAAQS levels; should the number of non-attainment areas or the level or number of NAAQS change, the number of emissions inventories reviewed and entered will also change.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.02 Number of area-source air quality assessments

Short Definition: This assessment is based on the number of area-source categories for which emissions are inventoried or calculated by county and entered into a database.

Purpose/Importance: The measure reflects the number of area-source emissions inventories developed for each area-source category and the affected counties in the State of Texas. The emissions inventory data are used for planning activities such as State Implementation Plans and are submitted to the EPA as required in the federal Clean Air Act of 1990.

Source/Collection of Data: Area sources are defined as a wide variety of sources that generate air pollution but are too small and too numerous to identify individually. The emissions inventory data used for this measure is developed for area-source categories by making regional or county emissions estimates. The estimates are derived from either a "top-down" approach that applies an EPA-approved emission factor to a generic activity indicator such as county total population or a "bottom-up" approach that uses local area surveys or site inspection data for assessing processes and materials usage of individual categories. *Each area-source emissions inventory is quality assured and loaded into the Texas Air Reporting (TexAER) database system.*

Method of Calculation: The *number of assessments is calculated by multiplying the number of emissions inventories developed for an area-source category by the number of counties with active sources.*

Data Limitations: The variety in the level of work performed on any particular area-source category limits its usefulness as an easily measured output measure.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.03 Number of on-road mobile-source air quality assessments

Short Definition: This measure depicts the number of on-road mobile-source transportation-related scenarios evaluated by the Air Quality Division. On-road mobile sources include vehicles used on roads for transportation of passengers or freight for which emissions are estimated in tons of emissions per year and tons per ozone-season average weekday.

Purpose/Importance: On-road mobile sources in large urban areas make up a very significant source of air emissions. In some ozone non-attainment areas, they are considered the largest source of ozone-forming pollutants. Emissions from these sources are included in strategies associated with ozone non-attainment area State Implementation Plans. Assessments are also used to evaluate the impacts of different vehicle inspection/maintenance (I/M) programs, roadway construction projects, and transportation-control measures.

Source/Collection of Data: Assessment counts are dependent on Air Quality Division staff reporting. Emission calculations and assessments are dependent on the inputs to the MOBILE computer model used to develop emission factors, as well as on the travel activity applied to emission factors to calculate emissions. Variables assessed in different travel scenarios include measured vehicle miles of travel, speeds, fleet composition, fuels, controls in place, and other information pertinent to the area of concern. Much of the travel-related data is provided by transportation planning agencies, at both the state and local level.

Method of Calculation: The EPA MOBILE computer model is the primary tool used to calculate mobile-source emissions. A particular set of inputs to the model will constitute a specific scenario being modeled. Collecting the input data, setting up and running the model, and applying the vehicle activity to estimate emissions for that scenario is considered one assessment. The number of assessments reported is based on a quarterly summation of weekly staff counts of mobile scenarios run for each week.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.04 Number of non-road mobile-source air quality assessments

Short Definition: This assessment is the number of non-road mobile-source categories for which emissions inventories are developed by county and entered into a database by the Air Quality Division. Non-road mobile sources include mobile engines, mobile equipments, and vehicles used off road for construction, agriculture, transportation, recreation, and many other purposes. The emissions from these sources are expressed in tons per year and tons per ozone-season average weekday.

Purpose/Importance: The measure reflects the number of non-road mobile-source emission inventories developed for specific analysis years needed for State Implementation Plan (SIP) development and other analyses. The data is collected at the county level. Non-road mobile sources make up a very significant source of air emissions. Emissions from these sources are included in strategies associated with non-attainment area State Implementation Plans.

Source/Collection of Data: Data used for this measure will come from the number of non-road source categories for which emissions estimates are developed.

Method of Calculation: The measure is accounted for by staff reporting the number of non-road source categories within each geographic area for which emissions are developed during the reporting period.

Data Limitations: None identified.
Calculation Type: Cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 01-01-01.05 Number of air monitors operated

Short Definition: Number of air monitors operated.

Purpose/Importance: This measure provides an indication of the agency's ability to collect scientific data concerning the level of air pollutants to which Texas citizens are being exposed. The number of air monitors operated includes a count of the total number of individual monitors including ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, air toxics, lead, particulate matter of 10 microns or less, particulate matter of 2.5 microns or less, wind speed/direction, etc. A computerized file is maintained by the Field Operations Support Division which provides information on all monitoring sites.

Source/Collection of Data: The manager of the Texas air-monitoring networks maintains a computerized file of all air monitors operating at each monitoring site in the state. Deployment personnel provide a written record to the network manager each time they make any changes in equipment at any monitoring site. The manager then updates the computerized file to reflect the network changes.

Method of Calculation: The computerized file depicts a site description and a listing of the number of each type of monitor at each site. The file contains formulas that automatically recalculate each time an entry is updated or added. The formulas sum the number of each type of monitor and then sum the totals for each type of monitor to derive a total number of air monitors in operation. Each quarter, the computerized file is printed in hard copy and the totals are calculated manually to verify the accuracy of the computerized file.

Data Limitations: This measure provides a reliable indication of the state's air pollution monitoring capability. The number of air monitors in operation across the state is limited by funding and staffing levels as well as by equipment failures.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 01-01-01.06 Tons of NO_x reduced through the Texas Emissions Reduction Plan

Short Definition: This measure is intended to show the amount of NO_x emissions projected to be reduced through projects funded by TERP incentive grants awarded each year. Note that the corresponding Outcome Measure (01-01.02) then shows the results of the projects as reported each year.

Purpose/Importance: The TERP program was established by the 77th Legislature (Senate Bill 5) to offset emission reductions required of construction equipment operation and required accelerated purchase of cleaner diesel engines by providing incentives for the purchase or retrofit of cleaner on- and off-road diesel engines.

Source/Collection of Data: The grant applications include information that is used to calculate the number of tons of NO_x that will be reduced by that project.

Method of Calculation: The total tons projected to be reduced by each project are calculated using the methodologies established in the TCEQ's *Guidelines for Emissions Reduction Incentive Grants* (RG-388). The calculations are different for each type of projects. Only those projects funded under the TERP Emissions Reduction Incentive Grants (ERIG) and Rebate Grants Programs, as included in the guidelines, are included in the calculation.

Data Limitations: None identified; the calculations use data provided with the grant applications. The projected tons that will be reduced must be calculated in order to evaluate the project and make the grant award.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-01.07 Number of vehicles replaced and/or repaired through LIRAP assistance

Short Definition: Number of vehicle (units) repaired or replaced in the Low-Income Vehicle Repair Retrofit and Accelerated Retirement Assistance Program (LIRAP). The program is also known as Air Check Texas Drive A Clean Machine.

Purpose/Importance: This measure determines the number of vehicle repairs and replacements that have taken place in the program.

Source/Collection of Data: This measure is generated from quarterly reports gathered by each program county for each quarter.

Method of Calculation: The cumulative number of vehicle repairs and replacements in each participating county for each quarter.

Data Limitations: Quarterly reports submitted by each participating county are not due until 30 days after the end of each quarter. To meet the performance measure timeline established, data will be reported from electronic data available as of the close of the quarter from each participating county. The data will then be updated, if necessary, based on the final quarterly reports submitted by the participating counties.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-01-01.01 Percent of data collected by TCEQ continuous and non-continuous air-monitoring networks

Short Definition: Percent of data collected by TCEQ continuous and non-continuous air-monitoring networks.

Purpose/Importance: The percent of valid data collected by the TCEQ continuous and non-continuous air-monitoring networks allows a comparison of state performance to federal monitoring requirements.

Source/Collection of Data: Valid measurements are defined as measurements that meet federal monitoring criteria. Total possible measurements for continuous monitoring are defined as the number of samples that should theoretically be collected during the reporting period. Only TCEQ data will be reported in this measure, and the source of the data will be TCEQ's automated data collections systems for continuous data and TCEQ's non-continuous air-monitoring databases for non-continuous data. The data will be reported once it is validated for the entire quarter (for most data, this is the quarter after it is collected), and the sampling periods will be those described by federal regulations: January–March, April–June, July–September, and October–December.

Method of Calculation: The percentage of valid data collected for each pollutant will be determined by dividing the number of valid measurements by the total possible measurements, then multiplying by 100. The percent of valid data collected by the networks will be determined by summing the percentages of valid data collected for all pollutants measured and dividing by the number of pollutants measured.

Data Limitations: None identified.
Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Efficiency 01-01-01.02 Average cost per air quality assessment

Short Definition: This measure accounts for the funds expended by the Air Quality Planning and Implementation Division on salaries and other operating expenses related to staff working on air quality assessments divided by the number of assessments performed during the period.

Purpose/Importance: This measure reflects agency efforts to produce air quality assessments in an efficient manner. It also relates operating expenses to a combination of three output measures; point-source assessments, area-source assessments and mobile-source assessments.

Source/Collection of Data: Operating expense data is taken from USAS reports for the Air Quality Planning and Implementation. The number of assessments for the period is compiled by staff in the Air modeling and Data Analysis Section.

Method of Calculation: Using budgetary figures maintained by the Air Quality Planning and Implementation Division, this measure will be reported by: (1) identifying the total funds expended and encumbered through the reporting period of salaries and operating costs for staff performing air quality assessments; (2) collect and combine point, area, and mobile air quality assessment outputs; and (3) divide the total identified expenses by the total number of point-source, area-source, and mobile-source air quality assessments conducted during the reporting period to derive an average cost per assessment.

Data Limitations: Since the outputs used to calculate this measure are not reported from a computer data file but are dependent on staff recording and reporting the number of assessments conducted, the reporting process is time consuming and subject to large variation. The resources expended on assessments vary widely between the different types of assessments, and the work load for mobile- and area-source assessments is highly dependent on customer demand.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Below projections.

Efficiency 01-01-01.03 Average cost of LIRAP vehicle emissions repairs/retrofits

Short Definition: Average cost of repairs/retrofits to cars participating in the Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) that fail the vehicle emissions portion of the Inspection and Maintenance test.

Purpose/Importance: This measure seeks to provide a better understanding of the amount of funds a county might expect to allocate for vehicle repairs or retrofits.

Source/Collection of Data: This measure will be generated from quarterly reports gathered by each program county.

Method of Calculation: An average cost of LIRAP repairs and retrofits will be calculated each fiscal year by averaging data collected from participating county quarterly reports. Participating counties report monies allocated to each repair station for repairs and retrofits.

Data Limitations: Data is limited by the accuracy and efficiency of data reporting conducted by each program county.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Efficiency 01-01-01.04 Average cost per ton of NO_x reduced through the Texas Emissions Reduction Plan

Short Definition: This measure is intended to show the average cost per ton of NO_x emissions projected to be reduced through projects funded by TERP incentive grants awarded each year.

Purpose/Importance: The TERP program was established by the 77th Legislature (Senate Bill 5) to offset emission reductions required of construction equipment operation and required accelerated purchase of cleaner diesel engines by providing incentives for the purchase or retrofit of cleaner on- and off-road diesel engines.

Source/Collection of Data: The grant applications include information that is used to calculate the number of tons of NO_x that will be reduced by that project.

Method of Calculation: The total tons projected to be reduced by each project funded are divided by the incentive amount for that project. The total tons projected to be reduced by each project are calculated using the methodologies established in the TCEQ's *Guidelines for Emissions Reduction Incentive Grants* (RG-388). The calculations are different for each type of projects.

Data Limitations: None identified; the calculations use data provided with the grant applications. The projected tons that will be reduced must be calculated in order to evaluate the project and make the grant award. The total tons projected to be reduced by the projects funded each year will be divided by the total grant awards for that year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-01-01.01 Number of days ozone exceedances are recorded in Texas

Short Definition: The number of days that ozone standards are exceeded by more than one National Air Monitoring Site in any urban area.

Purpose/Importance: The measure reflects compliance with National Ambient Air Quality Standards.

Source/Collection of Data: This information is tracked using the TCEQ's air quality database.

Method of Calculation: The sum of days by urban area that the ozone standards are exceeded. Ozone exceedances will be monitored by the National Air Monitoring Site (NAMS) network. If more than one NAMS site in any urban area exceeds the standards on any given day, that day would only count once. The exceedances will be based on the NAAQS standard in place at the beginning of the fiscal year (to be updated as necessary) for ozone.

Data Limitations: The measure depends on which federal standard (8 hour or 1 hour) is in place. This work is performed as needed. There are no quotas for State Implementation Plan (SIP) modeling.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Output 01-01-02.01 Number of surface water assessments

Short Definition: Number of surface water assessments includes a diverse assemblage of assessment types performed and reported by multiple divisions within the Office of Water.

Purpose/Importance: The measure attempts to quantify the surface water quality assessment activities of the agency. Assessment of water quality is essential to the identification of impacted water bodies, and the development of water quality standards, effluent standards for wastewater discharges, and watershed strategies.

Source/Collection: Surface water assessments reported under this measure may be performed by TCEQ staff, contractors, or a combination of TCEQ staff and contractors. The Water Quality Division of the Office of Water (1) compiles and reports quarterly WQMP updates for new or amended projected effluent limitations, service area population and designated management agencies information for entities applying for the State Revolving Fund Loan, and proposed waste load allocations for new dischargers and revisions for Total Maximum Daily Load (TMDL) updates; and (2) performs Receiving Water Assessments.

The Water Quality Planning Division of the Office of Water performs and reports: (1) Surface Water Quality Monitoring Special Studies; (2) the CWA Sections 305(b) and 303(d) Integrated Report, including the Nonpoint Source Assessment; (3) Clean Rivers Program Assessments; (4) Clean Rivers Program Special Projects; (5) Water Quality Management Plans; (6the CWA Section 319 Nonpoint Source Annual Report; (7) the CWA Section 319 Nonpoint Source Management Program; (8) Estuary Program Assessments finalized by either the Galveston Bay Estuary Program or the Coastal Bend Bays and Estuaries Program; (9) Use Attainability Analyses; and (10) TMDLs and TMDL I-Plans.

Method of Calculation: The assessments are tracked manually and reported by the Water Quality Planning Division along with any required explanation of variance from the projected performance of that division. Each assessment unit/parameter pair counts as one output for TMDLs, I-Plans, and TMDL equivalents. Each water body counts as one output for use-attainability analyses.

Data Limitations: The individual assessments included in the measure range from assessments requiring as little as one week to ten years to complete. Certain assessments come due every year, every other year, every five years, or every ten years. Some assessments are grant deliverables that occur only once, based on completion of the particular grant tasks. Other assessments, such as receiving water assessments and special studies, are performed as needed based on permitting demands for documentation of stream conditions, stream standards, and reasonable uses. Use-attainability analyses are performed as needed on individual water bodies when the existing standards appear to be inappropriate. The water quality standards may be reviewed for water bodies listed as impaired under the Clean Water Act, 303(d), when deemed necessary through a permit action, when suggested by stakeholders, or as part of the triennial Surface Water Quality Standards review process. Depending on the complexity of the total maximum daily load assessment, development may require less than a year to greater than five years. Within the fiscal year, the performance for the number of surface water assessments varies from quarter to quarter based on demand and available resources. In general, water quality assessment activities are scheduled for completion later in the fiscal year.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-02.02 Number of groundwater assessments

Short Definition: Number of groundwater assessments. The reports completed evaluate environmental or programmatic data related to groundwater quality or quantity issues.

Purpose/Importance: The measure attempts to quantify the groundwater assessment activities of the agency. Assessments range in complexity and effort from a basic data report compiling and analyzing the results of a field sampling trip to a major report evaluating the water resources, future demand and recommended management strategies for a multi-county area. Assessment of groundwater quality and quantity issues is essential to the protection and conservation of limited groundwater resources.

Source/Collection: The Water Supply Division (WSD) of the Office of Water performs and reports groundwater quality assessments, regional groundwater vulnerability assessments, groundwater management program assessments, pesticides in groundwater assessments for a range of state and federal mandates.

Method of Calculation: The assessments will be tracked manually with completion recorded in an electronic database and reported to the Strategic Planning and Assessment Section by the respective division identified above along with any explanation of variance required. The number of assessments by Office and the total of all assessments are reported quarterly for the agency by the Strategic Planning and Assessment Section.

Data Limitations: The individual assessments included in the measure range from assessments requiring as little as one week to one year to complete. Certain assessments come due each year and some every other year. Some assessments address federal or state mandates that may vary little or greatly from one fiscal year to the next. Within the fiscal year, the performance for the number of assessments varies from quarter to quarter. A straight-line projection of performance cannot describe the assessment activities. As such, the distribution cannot be normalized over a given time frame.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-02.03 Number of dam safety assessments

Short Definition: Number of dam safety assessments conducted. Assessments include on-site investigations as well as in-house review of plans and specifications for dams, spillway adequacies, breach analyses, emergency action plans, engineering reports, water-use permit applications involving dams, and water district creation reviews involving dams.

Purpose/Importance: The measure reflects the combined workload of the agency and the agency's contractor associated with ensuring the safety of dams in the state. Assessments are conducted to ensure the safe design, construction, maintenance, repair and removal of dams in the state.

Source/Collection of Data: Using the Dam Safety Module–which interfaces with several TCEQ databases, including CCEDS–this measure is the total number of dam safety and security assessments completed in the reporting period.

Method of Calculation: Query of agency database.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projection.

Efficiency 01-01-02.01 Average cost per dam safety assessment

Short Definition: Average cost per dam safety assessment completed. Assessments include on-site safety and security investigations as well as in-house review of plans and specifications for dams, spillway adequacies, breach analyses, emergency action plans, engineering reports, and water-use permit applications involving dams, and water district creation reviews involving dams.

Purpose/Importance: Assessments are conducted to ensure the safe design, construction, maintenance, repair, and removal of dams in the state. The average cost measures how efficiently these assessments are conducted.

Source/Collection of Data: Investigators enter investigation information into the Dam Safety Module, which interfaces with several TCEQ databases, including CCEDS. Each reporting period, the Dam Safety Section retrieves from the database the number of assessments completed. USAS (unified statewide accounting system) expenditure figures for the Dam Safety Program are used to determine costs.

Method of Calculation: Database query retrieves the total number of assessments completed during the reporting period. Average cost per assessment is calculated by dividing total funds expended as reported in the USAS for the Dam Safety Program by the total number of dam safety assessments conducted through the reporting period.

Data Limitations: Average cost figures may vary considerably due to the number and complexity of assessments performed.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-01-02.01 Percent of Texas' rivers, streams, wetlands, and bays protected by site-specific water quality standards

Short Definition: Percent of Texas' rivers, streams, wetlands, and bays protected by site-specific water quality standards.

Purpose/Importance: The Texas Surface Water Quality Standards establish explicit numerical goals for water quality in the surface waters of Texas. The percentage of water bodies that have been assigned site-specific water quality standards is a measure of how well the standards have been tailored to individual water bodies and in the state. Using the Texas Water Quality Inventory, the percentage of state waters with designated site-specific standards is determined for each major water body type. These numbers are then averaged in order to develop a single statewide percentage. Calculated annually.

Source/Collection of Data: The TCEQ Texas Water Quality Inventory is used as a data source to provide the size of individual water bodies, and also to provide the total amount of each water body type in the state. The Water Quality Inventory is a publicly available document that is periodically reviewed and updated by the TCEQ. The Texas Surface Water Quality Standards, which are established as Chapter 307 in Title 30 of the Texas Administrative Code, are used to determine the list of water bodies that are assigned site-specific water quality standards.

Method of Calculation: For this measure, water body types are defined as rivers, reservoirs, estuaries, and wetlands. The amount of (area or length) of "classified" waters with site-specific standards is determined for each water body type from the Texas Water Quality Inventory [305(b) report]. The length of partially classified streams is calculated from the current Texas Surface Water Quality Standards and added to the total of rivers with site-specific

standards. The length of partially classified streams is calculated by multiplying the number of partially classified streams in Appendix D of the standards by the average length of these streams (8.0 miles). To determine the total amount of each water body type in the state (classified and unclassified), information in the current Texas Water Quality Inventory is used as a baseline, except for reservoirs. For reservoirs, the total amount is based on the 1994 water quality inventory, since this total is not reported in more recent inventories. Newly constructed major reservoirs are added to the base total when they are completed. The percent of waters with standards is calculated for each water body type = 100 × (the amount of classified and partially classified waters / the total amount of that water body type). Then the percentages of each water body type with site-specific standards are averaged to obtain a single statewide percentage.

Data Limitations: The designation of water bodies with site-specific standards is typically revised every three years. Therefore, the rate of change of this measure is relatively slow.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-01-02.02 Number of dams in the Texas dam inventory

Short Definition: Number of dams in the Texas Dam Inventory.

Purpose/Importance: This measure reflects the number of dams in the state subject to dam safety assessments.

Source/Collection of Data: The Dam Safety Section will use information from field inspections, aerial photography, and new water-rights permit applications to maintain and update an existing database of approximately 7,250 dams. The database will be updated weekly by the additional listing of new dams and updated changes in the attributes of existing dams.

Method of Calculation: A query of the data maintained in state databases is run to obtain the number of existing dams.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-03.01 Number of active municipal solid waste facility capacity assessments

Short Definition: The number of annual capacity assessments for municipal solid waste landfills reviewed by the Waste Permits Division.

Purpose/Importance: To gather current and accurate landfill capacity data to assist in the development of regional solid waste management plans required by legislation (Chapter 363, Texas Health and Safety Code). This information is critical in determining whether sufficient disposal capacity exists to manage the quantity of municipal solid waste generated in the state.

Source/Collection of Data: Capacity assessment forms are prepared and downloaded to the agency's website annually and notice regarding submittal deadline is sent to municipal solid waste landfills by the Waste Permits Division. Customers have the option to submit hard-copy reports or report through the agency's e-reporting system. All data will be entered into an agency database. Data will be reviewed for consistency with

previously reported capacity data, as well as for consistency with related permit and fee data. The first quarter of the fiscal year is spent preparing the Annual Report form, preparing and sending out the report notice, and assisting customers with completion of the forms. The majority of reviews are performed in the second and third quarters. Preparation of the annual summary report occurs in the fourth quarter.

Method of Calculation: Capacity is reported in cubic yards, and landfill compaction rates in pounds per cubic yard, as based on actual field measurements or on allowable estimation methods. With this data, capacity is then converted to tons. Landfill life expectancy in years is then projected by dividing the capacity in tons by the number of tons disposed of in landfills during the annual reporting period.

Data Limitations: The number of capacity assessments depends wholly on the number of permitted landfills actively receiving waste in the state. This number may be affected by the issuance of new permits as well as by facility closures. Therefore, there may be some variance from the projected number of assessments. A number of landfills report capacity and compaction estimates rather than the results of actual field measurements. In addition, projected landfill life expectancies assume no changes in reported landfill size, disposal amounts, and compaction rates. Further, not all waste disposal is determined by actual scale weight, with much of waste disposal in the state determined by volume estimates.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-01-03.01 Average number of hours spent per municipal solid waste facility capacity assessment

Short Definition: Average number of hours spent per municipal solid waste facility capacity assessments.

Purpose/Importance: This measure reflects agency efforts to conduct municipal solid waste facility capacity assessments in an efficient manner.

Source/Collection of Data: The number of hours spent by the staff and management on gathering and evaluating municipal solid waste facility capacity assessments, evaluating the data, and preparing a statewide report on the data will be tracked. This is obtained by creating a program cost account (PCA) code that is used strictly for purposes of tracking this efficiency measure. The total number of hours charged monthly to this PCA code will be acquired through the USPS accounting system. Each quarter, the cumulative number of hours in the fiscal year charged to date to this PCA code will be divided by the total number of capacity assessments received in the fiscal year to date.

Method of Calculation: For the first quarter, the number of hours attributed to the PCA code created and strictly used for this project will be divided by the total number of capacity assessments received to date. The resulting hours per capacity assessments will be reported. For each of the following quarters, cumulative values for the number of hours attributed to the PCA code and the number of reports received will be used. By the fourth quarter, the efficiency on an annual basis has been determined.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-01-03.01 Number of council of government regions in the state with 10 years or more of disposal capacity

Short Definition: Of the 24 council of government (COG) regions in the state, the number with 10 years or more of projected municipal solid waste landfill capacity remaining.

Purpose/Importance: To identify those regions of the state with projected capacity to handle disposal needs for the next 10 years. Meeting this need may require more detailed solid waste management planning, possibly at the local level.

Source/Collection of Data: Capacity data are obtained through the annual reporting program for municipal solid waste landfills.

Method of Calculation: Capacity data entered into the program database is sorted geographically by COG region. Capacity is reported in cubic yards, and landfill compaction rates in pounds per cubic yard, as based on actual field measurements or on allowable estimation methods. With these data, capacity is then converted to tons. Landfill life expectancy in years for each COG region is then projected by dividing the capacity in tons by the number of tons disposed of in landfills during the annual reporting period. If results indicate a shortage of landfill capacity, staff reviews the anticipated capacity increases and/or disposal capacity utilized by a neighboring region. If analysis shows an actual shortage exists, the number is reported and planning is initiated.

Data Limitations: A number of landfills report capacity and compaction estimates rather than the results of actual field measurements. In addition, projected landfill life expectancies assume no changes in reported landfill size, disposal amounts, and compaction rates. Further, not all of total waste disposal is determined by actual scale weight, with much of waste disposal in the state determined by volume estimates.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.01 Percent of air quality permit applications reviewed within established time frames

Short Definition: The percentage of total air quality permit applications reviewed within respective time frames for various application categories; the measure considers applications for both New Source Review (NSR) and Title V permits. Target time frames for NSR applications: new permits – 285 days; amendments – 315 days; new federal permits (such as, prevention of significant deterioration, non-attainment, 112[g] or 112[j]) and their major modifications – 365 days; permits by rule, standard permits without public notice, changes to qualified facilities, and relocations – 45 days; standard permits with public notice – 150 days; standard permits for concrete batch plant – 195 days; multiple plant permits – 330 days; alterations and other changes, de minimis requests – 120 days; renewals – 270 days; and maintenance, startup, shutdown (MSS) permits – 365 days. Target time frames for Title V applications: site operating permits (SOP) initial issuance, revisions, and renewals – 365 days; SOP voids and operating permit (OP) notifications – 60 days; general operating permits (GOP) initial issuances – 120 days; GOP revisions – 330 days; GOP renewals – 210 days; and GOP voids – 60 days. Target time frames will not apply to applications for which a hearing has been requested.

Purpose/Importance: This measure indicates the extent to which the Air Permits Division (APD) reviews air quality permit applications within established time frames. The time frames are based on permitting history and an evaluation of reasonable workload for permit-application reviewers.

Source/Collection of Data: The sources of data for this measure are APD's NSR and Title V Information Management Systems (IMS) databases. The data is retrieved by running the appropriate queries on the NSR and Title V Permits IMS databases.

Method of Calculation: The measure value is calculated by dividing the number of applications reviewed within the target time frame by the total number of applications reviewed. This procedure is conducted for all NSR and Title V application categories by queries on the NSR and Title V Permits IMS databases. The queries count each complete permit application and its respective number of days from the receipt date to the final action date. The processing times for each application are then compared to the respective target time frames, the number of applications processed within the target time frames is counted, and this number is then divided by the total number of applications to determine the percent of applications reviewed within the target time frames. NSR applications are considered reviewed when the permit action is signed by the Executive Director (or designee), or when the application is considered void. Title V applications are considered reviewed when a grant letter or permit is signed by the Executive Director (or designee) of the TCEQ, or the date on which the Executive Director (or designee) takes action to deny or void the application, or when the applicant withdraws the application.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.02 Percent of water quality permit applications reviewed within established time frames

Short Definition: This measure includes non-contested wastewater permit applications. The percent of municipal and industrial wastewater permits reviewed within targeted time frames will be determined by dividing the number of applications reviewed within targeted time frames in that quarter by the total number of permits reviewed during that quarter and does not include contested permits or permits under additional review by the EPA. This information is tracked using databases administered in the wastewater permitting program. The targeted time frame for the review of municipal and industrial wastewater permits is established by statute, agency rules, or agency standard operating procedures.

Purpose/Importance: This measure indicates whether the agency is in compliance with established time frames for processing permit applications.

Source/Collection of Data: Staff enters all pertinent application information into the wastewater permitting databases as the application is processed. Staff queries this database and total the number of completed reviews within the fiscal year. Staff then subtracts the permit issuance date from the application received date to determine the review time for all reviews completed within the fiscal year.

Method of Calculation: The number of reviews completed within established time frames are summed and divided by the total number of reviews completed within the fiscal year. Staff then reports the percent of wastewater permits reviewed within established time frames to Strategic Planning and Assessment.

Data Limitations: Applications are excluded from the count when suspended from processing in accordance with either agency rules or agency policy.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.03 Percent of water-rights permit applications reviewed within established time frames

Short Definition: This measure includes non-contested water-rights permit applications. The percent of water rights permit applications reviewed within targeted time frames will be determined by dividing the number of applications reviewed within the targeted time frame by the total number of permits issued in the fiscal year. This information is tracked using water-rights databases. The targeted time frame for the review of water rights permits is established by statute, agency rules or agency standard operating procedures.

Purpose/Importance: This measure indicates to what extent the Water Availability Supply Division's staff is in compliance in processing permit applications within established time frames.

Source/Collection of Data: Staff enters all pertinent application information into the water-rights permitting databases as the application is processed. Staff queries this database and total the number of completed reviews within the fiscal year. Staff then subtracts the completed date from the date of receipt to determine the review time for all reviews completed within the fiscal year.

Method of Calculation: The number of reviews completed within established time frames are summed and divided by the total number of reviews completed. Staff then reports the percent of water-rights permits reviewed within established time frames to Strategic Planning and Assessment.

Data Limitations: Applications are excluded from the count when suspended from processing in accordance with either agency rules or agency policy.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-02.04 Percent of waste management permit applications reviewed within established time frames

Short Definition: Percent of waste management permit applications reviewed within established time frames.

Purpose/Importance: This measure reports whether the agency is in compliance with established time frames for reviewing permit applications.

Source/Collection of Data: Using an automated tracking system maintained by the Office of Waste, this measure will track the number of waste permit applications reviewed during the fiscal year and the number of waste permit applications that were reviewed within the prescribed agency time frames during the fiscal year. An application is considered reviewed upon: transmittal of the final draft permit from the program to the Chief Clerk's Office for completion of other final actions or the return/withdrawal of the application to the applicant either at the applicant's request or as the result of administrative or technical deficiencies. The percent of waste permit applications reviewed will be derived by dividing the total number of waste permit applications reviewed within the target time frames by the total number of waste permit applications reviewed for the fiscal year. This process will be completed on the following waste permit applications: (1) new, renewals, major and minor amendments, and Class 1, Class 1ED, Class 2, or Class 3 modifications, and post closure orders for industrial nonhazardous solid waste facilities and hazardous waste treatment, storage, and disposal facilities, (2) regulatory flexibility orders for hazardous waste treatment, storage and disposal facilities and industrial nonhazardous waste facilities, (3) new, renewals, major and minor amendments, and minor modifications for UIC Class I Injection Well and Class III Injection Wells, (4) authorizations and new permits and revisions for UIC Class IV and V Injection Wells, (5) new, registrations, major and minor amendments, and notice and no-notice modifications for

municipal solid waste, and (6) new, renewals, and major and minor amendments for radioactive material licenses and disposal.

Method of Calculation: Query agency databases for the number of applications reviewed and determine those reviewed within established time frames. Express as a percentage.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-01.01 Number of state and federal new source review air quality permit applications reviewed

Short Definition: The total number of new permits, permit amendments, permit alterations, and permit-by-rule applications reviewed under the Texas Clean Air Act and the federal NSR permitting programs (*see additional detail, next section).

Purpose/Importance: This measure quantifies the permitting workload of the Air Permits Division staff assigned to review state and federal new source review permit applications. *The count includes those applications that are withdrawn or denied, and which therefore do not result in permit approval or issuance. Application types in this count include General Permits, Standard Permits, Flexible Permits, and federal Prevention of Significant Deterioration (PSD) and Non-Attainment Area (NAA) permits.

Source/Collection of Data: The source of the data for this measure is the NSR Permits Information Management System (IMS) database. An entry for each project is created in the database when the project is received in the Air Permits Division. Application reviewers are responsible for tracking certain elements of their assigned projects' progress through the review process, and ensuring that these tracking elements are entered into the database by data entry staff. Data entry for each project is closed at the time the project is approved, issued, denied, or withdrawn. Completion of the review process occurs when permits are signed by the Executive Director (or designee) of the TCEQ, or when the application is considered void.

Method of Calculation: The measure value is calculated as the sum of the total number of applications for new permits, permit amendments, permit alterations and permit-by-rule registrations reviewed by the Air Permits Division. The necessary data is retrieved by query of the NSR IMS.

Data Limitations: A potential limitation of data accuracy is the time lag between completion of a project and the entry of the completion tracking elements into the database. Generally, this time lag is less than one week.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-01.02 Number of federal air quality operating permits reviewed

Short Definition: The total number of applications for federal air quality operating permits reviewed under Title V of the federal Clean Air Act (CAA) (see additional detail, next section).

Purpose/Importance: This measure quantifies the permitting workload of the Air Permits Division staff assigned to review federal operating permit applications. *This count includes those applications that are withdrawn, voided, or denied and which therefore do not result in permit authorization, approval, or issuance.

Source/Collection of Data: The source of the data for this measure is the Title V Information Management System (IMS) database. An entry for each project is created in the database when the project is received in the Air Permits Division. Application reviewers are responsible for tracking certain elements of their assigned projects' progress through the review process, and ensuring that these tracking elements are entered into the database. Data entry for each project is closed when the project is approved, issued, denied, voided or withdrawn. Completion of the review process occurs when grant letters (GOP) and permits (SOP) are signed by the Executive Director (or designee) of the TCEQ, when the Executive Director (or designee) takes action to deny or void the application, or when the applicant withdraws the application.

Method of Calculation: The measure value is calculated as the sum of the total number of applications for federal air quality operating permits reviewed under Title V of the CAA. The necessary data is retrieved by query of the Title V IMS.

Data Limitations: A potential limitation of data accuracy is the time lag between completion of a project element and the entry of the completed tracking elements into the database. Generally, this time lag is less than one week.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-01.03 Number of Emissions Banking and Trading transaction applications reviewed

Short Definition: The total number of Emissions Banking and Trading (EBT) transaction applications for the Emission Reduction Credits, Discrete Emission Reduction Credits, Mass Emission Cap and Trade, Emissions Banking and Trading of Allowances, and System Cap Trading programs reviewed by the Air Quality Division (*see additional detail next section).

Purpose/Importance: This measure quantifies the EBT workload of the Air Quality Division staff assigned to review EBT applications. *This count includes those applications that are withdrawn or denied, and which therefore do not result in transaction approval or credit issuance. Application types include emission credit and discrete emission credit certifications, emission credit and discrete emission credit notices of intent to use, cap and trade level of activity certifications, cap and trade annual reports, and credit/allowance transfers.

Source/Collection of Data: The source of data for this measure is the Emission Banking and Trading information management system database. An entry for each project is created in the database when the project is received in the Air Quality Division. Application reviewers are responsible for tracking certain elements of their assigned projects' progress through the review process, and ensuring that these tracking elements are entered into the database by data entry staff. Data entry for each project is closed at the time the project is approved, denied, withdrawn, or issued. The data is retrieved by running a query on the EBT database.

Method of Calculation: This measure is calculated as the sum of the total number of EBT transactions applications for the period of interest.

Data Limitations: A potential limitation to data accuracy is the time lag between completion of a project and the entry of the completion tracking elements into the database. Generally, this time lag is less than one week.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-01.01 Number of state and federal air quality permits issued

Short Definition: The number of state and federal new source review (NSR) air quality permits that were actually issued or approved. For purposes of NSR permits, "issued" means the Executive Director (or designee) of the TCEQ has signed the permits.

Purpose/Importance: This measure quantifies those NSR air quality permits applications, reviewed under the Texas Clean Air Act and the federal NSR permitting programs, which resulted in issued or approved permits.

Source/Collection of Data: The source of data for this measure is the NSR Permits Information Management System (IMS) database. The data is retrieved by running a query on the NSR IMS.

Method of Calculation: The measure value is calculated as the sum of the state and federal NSR permits issued or approved during the reporting period.

Data Limitations: A potential limitation of the data is the time lag between completion of a project element and the entry of the tracking element into the database. Generally, this time lag is less than one week.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-01.02 Number of federal air quality permits issued

Short Definition: The number of federal air quality operating permits reviewed under Title V of the federal Clean Air Act (CAA) that was actually issued. For purposes of operating permits, "issued" means EPA review has been completed, and the Executive Director (or designee) has signed the grant letters and/or permits.

Purpose/Importance: This measure quantifies those federal air quality operating permits applications, reviewed under Title V of the CAA, which resulted in issued or approved permits.

Source/Collection of Data: The source of the data for this measure is the Title V Permits Information Management System (IMS) database. The data is retrieved by running a query on the Title V Permits IMS.

Method of Calculation: The measure value is calculated as the sum of the number of federal operating permits issued or approved during the reporting period.

Data Limitations: A potential limitation of the data is the time lag between completion of a project element and the entry of the tracking element into the database. Generally, this time lag is less than one week.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-02.01 Number of applications to address water quality impacts reviewed

Short Definition: Number of applications to address water quality impacts reviewed.

Purpose/Importance: This measure reflects agency workload with regard to the review of water quality permit applications.

Source/Collection of Data: The Wastewater Permitting Section will provide a number each reporting period that identifies the number of municipal and industrial wastewater permits it has drafted and filed with the Chief Clerk for public notice. Filing of draft permits with the Chief Clerk denotes completion of the program review process. This information is tracked on databases within the Wastewater Permitting Section. The total number of sewage sludge beneficial use registrations and permits, sewage sludge process and/or disposal permits, and

water treatment sludge land application registrations and/or disposal permits will be included. In addition, the total number of general permits Notice of Intent (NOI), No Exposure Certifications (NECs), and Erosivity Waivers processed will be included. The mailing of the confirmation letter to the applicant denotes the completion of the program review. This measure does not include authorizations by rule or pretreatment audits. In addition to the information provided by the Wastewater Permitting Section, this measure will include Edwards Aquifer (EA) protection plans reviewed and applications reviewed for on-site sewage facilities (OSSF) by the Field Operations Support Division (FOSD). This information will be based on EA plan reviews that are completed and entered into CCEDS during the reporting period and OSSF applications that are reviewed during the reporting period.

Method of Calculation: The wastewater permitting section provides data from their database and the Field Operations Support division provides their data to the Wastewater Permitting Section. These two numbers are added together to provide the number of applications reviewed.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-02.02 Number of applications to address water-rights impacts reviewed

Short Definition: This measure is the number of permitting action reviews completed and is calculated by totaling the number of water-rights applications, ownership transfers, temporary permits by Water Rights and regional staff, and water supply contracts processed and reviewed during the reporting period.

Purpose/Importance: This measure reflects agency workload with regard to the review of water rights permit applications.

Source/Collection of Data: Water Rights Permitting staff enter milestone information into databases. Staff queries these databases for application reviews completed this quarter and reviews monthly activity reports for ownership changes and supply contracts. The numbers reported by Water Rights Permitting do not include Region numbers. The Field Operations Support Division provides data to the Water Supply Division.

Method of Calculation: Applications completed this quarter are summed together with ownership changes and contracts as reported in monthly activity reports.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-02.03 Number of concentrated animal feeding operation (CAFO) authorizations reviewed

Short Definition: Number of concentrated animal feeding operation (CAFO) authorizations reviewed.

Purpose/Importance: This measure reflects agency workload with regard to processing CAFO authorizations.

Source/Collection of Data: Using information maintained by the Water Quality Assessment Section, this measure will be reported at the end of each quarter by calculating the total number of concentrated animal feeding operation individual permits and Notices of Intent (NOIs) for coverage under the general permit reviewed/processed by the staff. Transmittal of reviewed applications from the program to the Chief Clerk's Office denotes process completed by the program. The mailing of the confirmation letter to the applicant for NOIs submitted for coverage under the general permit denotes the completion of the program review.

Method of Calculation: Using information maintained on the TRACS database for individual permits and the ARTS database for NOIs, this measure will be reported at the end of each quarter by calculating the total number of concentrated animal feeding operation permits reviewed by the staff and the total number of confirmation letters mailed for coverage under the general permit. Transmittal of reviewed applications from the program to the Chief Clerk's Office denotes process completed by the program.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-02.01 Number of water quality permits issued

Short Definition: This measure will report the total number of water quality permits approved by the Executive Director or by the Commissioners.

Purpose/Importance: To report the number of TPDES, State, and Agricultural permits issued for the year.

Source/Collection of Data: This information is tracked in a database maintained by the Chief Clerk's Office.

Method of Calculation: This information is pulled from the database maintained in the Chief Clerk's Office and is supplied by a query to the database by the date the permit was signed.

Data Limitations: None Identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-02.02 Number of water-rights permits issued

Short Definition: This measure will report the total number of water-rights permits approved by the Executive Director or by the Commissioners.

Purpose/Importance: To report the number of water-rights permits issued for the year.

Source/Collection of Data: This information is tracked in a database maintained by the Water Rights Permitting and Availability Section.

Method of Calculation: This information is pulled from the database maintained in the Water Rights Permitting and Availability Section and is supplied by a query to the database by the date the permit was signed.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-03.01 Number of new system waste evaluations conducted

Short Definition: Audits conducted on generators' self-classification of their industrial waste.

Purpose/Importance: That wastes are correctly classified to ensure appropriate management, disposal, and fee assessment.

Source/Collection of Data: The data are collected through the waste stream notifications submitted by waste generators regulated by the TCEQ. In the case of out-of-state wastes written submissions from the generators

are used. Waste streams are audited on a random basis or manually selected from a database maintained by the Waste Permits Division when there is sufficient information to suspect the wastes were classified incorrectly.

Method of Calculation: On a monthly basis the total number of completed audits is maintained in a division spreadsheet. On a quarterly basis the total is derived, reconciled against information from the division maintained database, and reported. Audits are considered complete when: (1) the auditee submits sufficient data for the TCEQ to review, and (2) the TCEQ has sufficient time to complete the review.

Data Limitations: Data could be affected by lack of response from generators or incorrect written submissions received from the generators.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-02-03.02 Number of non-hazardous waste permit applications reviewed

Short Definition: Number of non-hazardous waste permit applications and other authorizations reviewed. This includes the number of permit and registration application reviews for new, modified, or amended MSW storage, treatment, and processing permits, which includes recycling and disposal facilities and renewed or amended commercial industrial non-hazardous waste landfill (CINWL) facilities. This also includes the number of notifications and other authorizations reviewed.

Purpose/Importance: This measure quantifies the number of reviews conducted to ensure that proposed facilities meet design and operational requirements and are protective of human health and the environment.

Source/Collection of Data: Information regarding the status of individual MSW or CINWL permit applications is maintained in a database maintained by the Waste Permits Division. Date of review of a permit is entered into the database by a TCEQ staff member when a permit application is deemed technically complete. Using an agency database maintained by the Waste Permits Division, this measure will calculate the total of (1) the number of final draft permits for new, modified, and/or amended municipal solid waste storage, treatment, and disposal facilities; (2) the number of final draft permits for new, renewed, and/or amended commercial industrial non-hazardous waste landfill facilities; (3) the number of technical completions prepared for municipal solid waste and commercial industrial non-hazardous waste landfills; (4) the number of municipal solid waste and commercial industrial non-hazardous waste landfill applications denied and withdrawn by the Commission; (5) the number of new and modified MSW registrations; and (6) the number of notifications and other authorizations acknowledged.

Method of Calculation: Totals are calculated by adding the numbers for each category together. For permit and registration applications, review is considered complete upon issuance of the final draft permit or registration. For modifications, completion of review is upon final draft modification or final action as appropriate for the type of modification. For notifications and other authorizations, review is considered complete upon issuance of the acknowledgement letter.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 01-02-03.03 Number of hazardous waste permit applications reviewed

Short Definition: Number of permits, orders, licenses, and authorizations reviewed, denied, or withdrawn. Includes all permitting and authorization actions for hazardous waste facilities and industrial non-hazardous waste storage and processing facilities (new, renewed, major and minor amendments, modifications (Class 1, Class 1 with prior approval of the Executive Director (Class 1 ED), Class 2, and Class 3), post closure care orders and regulatory flexibility orders and Class I, Class III, Class V Underground Injection Control (UIC) wells (new, renewed, major and minor amendments, minor modifications, and regulatory flexibility orders), and radioactive-material facilities (new, renewed, and major and minor amendments).

Purpose/Importance: This measure quantifies the number of environmentally protective authorizations recommended by the TCEQ staff.

Source/Collection of Data: Using an agency database maintained by the Waste Permits Division, this measure will calculate the total of (1) the number of final draft permits/orders for new, renewals, major and minor amendments, Class 1ED, 2, 3 modifications, regulatory flexibility orders, and post closure care orders for hazardous and industrial waste storage, treatment and disposal facilities; (2) the number of Class 1 modifications for hazardous and industrial waste storage, treatment, and disposal facilities; (3) the number of final draft permits for new, renewed, amended and modified underground injection control wells; (4) the number of new and amended authorizations for underground injection control wells; and (5) the number of applications returned and/or withdrawn. A reviewed application is defined as: transmittal of the final draft permit, license, or order from the program to the Chief Clerk's Office, the return/withdrawal of the application to the applicant either by the applicant's request or as the result of administrative or technical deficiencies, or the transmittal of an authorization or modification letter to the applicant. Data maintained in the database includes the facility name, identification number, date application is received, and date reviewed, or returned/withdrawn prior to final draft permit, or date of authorization or modification letter. Data is entered after the action has occurred. A reviewed application is defined as an application received and the transmittal of the final draft permit from the program to the Office of Chief Clerk or transmittal to the company of an authorization, modification letter or rejection letter.

Method of Calculation: Totals are calculated by adding the number of reviewed items together.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-03.01 Number of non-hazardous waste permits issued

Short Definition: Number of non-hazardous waste permits issued.

Purpose/Importance: This measure reflects agency workload with regard to the number of permits issued. This measure quantifies the number of permits issued for facilities that are protective of human health and the environment.

Source/Collection of Data: Using an agency database maintained by the Waste Permits Division, this measure will be reported by calculating the number of permits and registrations issued or notifications and other authorizations acknowledged for municipal facilities and commercial industrial nonhazardous waste landfill facilities in the fiscal year. A permit issued is one that has been signed by either the Executive Director (or designated representative) or by the Commission. Date of issuance of a permit is entered into the database by the TCEQ

staff member when a copy of the issued permit is received by the Waste Permits Division from the Chief Clerk's Office. Date of the notification or other authorization acknowledged is entered into the database when the notification or other authorization is acknowledged by letter and assigned a notification or authorization number.

Method of Calculation: Query agency databases for reported performance. Totals are calculated by adding the numbers of issued permits, registrations, modifications, and amendments.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 01-02-03.02 Number of hazardous waste permits issued

Short Definition: Number of hazardous waste permits or orders; industrial non-hazardous waste storage and processing permits or orders; UIC permits, orders, and authorizations.

Purpose/Importance: This measure reflects agency workload with regard to the number of permits/orders/authorizations issued.

Source/Collection of Data: Using an agency database maintained by the Office of Waste, this measure will be reported by calculating the number of permits, orders, and authorizations issued for hazardous waste facilities, industrial non-hazardous storage and processing waste facilities, UIC Class I injection wells, UIC Class III injection wells, and UIC Class V injection wells. A permit, order, or authorization issued is one that has been signed by either the Executive Director (or designated representative) or by the Commission.

Method of Calculation: Query agency database for reported performance. Totals are calculated by adding the numbers of issued permits, orders, and authorizations.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-03.03 Number of corrective actions implemented by responsible parties for solid waste sites

Short Definition: Number of corrective actions at non-hazardous solid waste landfills.

Purpose/Importance: This measure reflects the number of corrective actions being performed by responsible parties to remediate releases from municipal solid waste and commercial industrial non-hazardous waste landfills.

Source/Collection of Data: Using an agency tracking system and manual record reviews maintained by the Waste Permits Division, this measure will be reported by calculating the number of municipal solid waste and commercial industrial non-hazardous waste landfill facility corrective action plans received and reviewed by staff, then implemented by responsible parties in accordance with their approved plans during the reporting period. This includes all corrective action activities (including groundwater and landfill gas remediation) at permitted municipal solid waste and commercial industrial non-hazardous waste landfill facilities. A corrective action is considered complete upon issuance of a letter by the agency to the responsible party indicating approval of corrective-action activities.

Method of Calculation: Query agency database and verify results with appropriate project managers.
Data Limitations: None identified.
Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 01-02-04.01 Number of applications for occupational licensing

Short Definition: The number of individual applications for environmental professional licensure and registration that are received by the agency and are entered into the Consolidated Compliance and Enforcement Data System (CCEDS), and either issued a license, a deficiency letter, or a failure letter during the reporting period.

Purpose/Importance: This measure indicates the number of new and renewal applications received. It is a primary measure of workload and it indicates the number of potential licensed or registered professionals or companies.

Source/Collection of Data: The Permitting and Registration Support Division staff scans or manually enters data into the CCEDS for the applications received during this period.

Method of Calculation: This measure is calculated by running a query of CCEDS of all applications for environmental professional licensure and registration received by the agency during the reporting period.

Data Limitations: Receiving some applications at the central office may be dependent on the designated agents submitting them timely.

Calculation Type: Cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 01-02-04.02 Number of examinations processed

Short Definition: The number of individual examinations received by the agency and entered into the Consolidated Compliance and Enforcement Data System (CCEDS) for processing.

Purpose/Importance: This measure indicates the number of exams administered to applicants who are potential licensees.

Source/Collection of Data: The Permitting and Registration Support Division staff scans or enters exam information into the Consolidated Compliance and Enforcement Data System (CCEDS) after examinations are administered by the commission's designated agents, the Permitting and Registration Support Division, and Field Operations Support Division staff.

Method of Calculation: This measure is calculated by running a query of CCEDS for all examinations processed during the reporting period.

Data Limitations: Receiving the examinations at the central office for processing is dependent on the designated agents submitting it timely.

Calculation Type: Cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 01-02-04.03 Number of licenses and registrations issued

Short Definition: The number of new, newly upgraded, or renewed licenses and registrations issued to individuals and companies during the reporting period.

Purpose/Importance: This measure indicates the number of licenses that were issued or renewed for individuals and companies who have met licensing or registration requirements.

Source/Collection of Data: The Permitting and Registration Support Division staff generates certificates and licenses for qualified applicants and maintain this information in the Consolidated Compliance and Enforcement Data System (CCEDS).

Method of Calculation: This measure is calculated by running a query of the CCEDS database for new, newly upgraded, or renewed licenses and registrations issued to individuals and companies during the reporting period.

Data Limitations: Licensed individuals and companies may have change of addresses that go unreported to the agency. This may result in the loss of the license or registration due to failure to renew.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 01-02-04.01 Average annualized cost per license and registration

Short Definition: The average annualized cost per license and registration.

Purpose/Importance: Reflects average annualized cost for the licensing program per number of active licenses and registrations maintained by the agency.

Source/Collection of Data: The Operator Licensing Section annual budget is obtained from USAS. The licensing and registration data is maintained in the Consolidated Compliance and Enforcement Data System (CCEDS).

Method of Calculation: This measure is calculated by dividing the Operator Licensing Section total annual salary budget by the total number of licensees/registrants in force by the agency at the end of the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 01-02-04.01 Number of TCEQ licensed environmental professionals and registered companies

Short Definition: The total number of environmental professional licenses and registrations currently registered with the agency.

Purpose/Importance: This measure presents the order of magnitude of the TCEQ licensing programs. It provides basic information for workload evaluation.

Source/Collection of Data: The Permitting and Registration Support Division maintains this information in the Consolidated Compliance and Enforcement Data System.

Method of Calculation: This measure is calculated by querying CCEDS for all active licenses and registrations.

Data Limitations: None.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-03-01.01 Number of radiological monitoring and verification samples of air, water, soil, and fauna collected

Short Definition: The number of radiological monitoring and verification samples of air, water, soil/sediment, and flora collected to address and evaluate an immediate threat to human health and safety and the environment.

Purpose/Importance: This measure provides an indication of the number of actual samples taken by the agency to be analyzed for early warning of the migration of radiological constituents from regulated activities to protect human health and safety and the environment.

Source/Collection of Data: This measure will use an agency database to track all samples taken by staff during inspections, confirmatory surveys, reclamation confirmations, and any other environmental monitoring and sampling events.

Method of Calculation: Using an agency database maintained by the Radioactive Materials Division, at the end of each quarter, the total number of samples taken during that quarter are determined. The total for each quarter is added to the total for any previous quarters during that fiscal year to come up with a cumulative total of samples taken during that fiscal year.

Data Limitations: None known at this time.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-03-01.01 Total annual amount of revenue deposited to the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive waste and other radioactive substances

Short Definition: The total annual amount of revenue received by the TCEQ and deposited into the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive and other radioactive substances at any Texas disposal facility.

Purpose/Importance: This measure provides an indication of the gross receipts of private, commercial operations that are accepting radioactive substances, and specifically low-level radioactive waste, from others for permanent disposal within the boundaries of the State of Texas.

Source/Collection of Data: This measure will use an agency database to track all revenue received by the TCEQ and deposited into the General Revenue Fund generated from the 5 Percent Gross Receipts Fee on the disposal of low-level radioactive waste and other radioactive substances at any Texas disposal facility.

Method of Calculation: Using an agency database maintained by the Radioactive_Materials Division and information from the Revenues Section of the Financial Administration Division, at the end of each quarter, the total of deposits made during that quarter is determined. The total for each quarter is added to the total for any previous quarters during that fiscal year to come up with a cumulative total deposited during that fiscal year.

Data Limitations: None known at this time.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-03-01.02 Volume of low-level radioactive waste accepted by the State of Texas for disposal at the Texas Compact Waste Facility

Short Definition: The total volume of low-level radioactive waste accepted by the State of Texas for disposal at the Texas Compact Waste Facility.

Purpose/Importance: This measure provides an indication of the total volume of low-level radioactive waste arriving in shipments at the Compact Waste Disposal Facility, taken title of by the TCEQ on behalf of the State of Texas, and subsequently permanently disposed of in the state-owned facility.

Source/Collection of Data: This measure will use an agency database to track all material received.

Method of Calculation: Using an agency database maintained by the Radioactive Materials Division. at the end of each quarter, the total volume accepted by the State of Texas for disposal at the Texas Compact Waste Facility during that quarter is determined. The total volume for each quarter is added to the total for any previous quarters during that fiscal year to come up with a cumulative total volume taken during that fiscal year.

Data Limitations: None known at this time.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Outcome 02-01.01 Percent of Texas population served by public water systems that meet drinking-water standards

Short Definition: This measure will report the percent of the total Texas residential population served by all public water systems (PWSs) that have not had maximum contaminant level (MCL) violations, lead action level violations, or treatment technique violations.

Purpose/Importance: Measures the success of regulatory activities conducted by the TCEQ to protect the public health of Texans receiving water from a public drinking-water system. This measure reflects the percent of the population in Texas served by drinking-water systems that meet drinking-water standards.

Source/Collection of Data: Population information is gathered during each comprehensive compliance investigation (CCI) survey of a public water system (PWS) conducted by field staff. Violation data is obtained from the review of chemical and microbiological sample analysis data that is submitted to the TCEQ from accredited certified laboratories after samples are collected by the PWS personnel or by contract sample collectors. Chemical and microbiological sample analysis data reports are kept in the TCEQ Central Records. Population, sample analysis, and violation data are kept in the Safe Drinking Water Information System (SDWIS).

Method of Calculation: Using the SDWIS, the measures are based on the total Texas population served by PWSs that have not had maximum contaminant level (MCL), lead action level, or treatment technique violations, as described by the Public Drinking Water Standards. This population figure is divided by the total Texas population served by all public water systems and multiplied by 100 to derive a percentage.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 02-01.02 Percent of Texas population served by public water systems protected by a program that prevents connections between potable and non-potable water sources

Short Definition: The percent of the Texas population served by community public water systems protected by a program that prevents backflow from cross-connections to actual or potential contamination hazards.

Purpose/Importance: To indicate what percentage of the population is served by community public water systems that have cross-connection control programs. Having a cross-connection control program protects the public water system from contamination caused by backflow of actual or potential contamination hazards into the system, as required by Texas Health and Safety Code 341.033(f).

Source/Collection of Data: Data is collected from cross-connection control program questionnaires that were mailed to community public water systems in the State of Texas, comprehensive compliance inspections conducted by TCEQ regional staff, and cross-connection control program surveys conducted by TCEQ central office staff.

Method of Calculation: Using information from the TCEQ public water supply databases, the number of Texas residents served by community water systems that have a cross-connection control program will be divided by the total residential population served by community public water systems, and the result multiplied by 100 to get a percentage.

Data Limitations: Data is limited by the information provided by the community public water systems in returned cross-connection control program questionnaires and the reported population of the State of Texas served by community water systems.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-01.01 Number of public drinking-water systems that meet primary drinking-water standards

Short Definition: Number of public drinking-water systems that meet drinking-water standards.

Purpose/Importance: Measures the success of all regulatory activities conducted by the TCEQ to protect the public health of Texans receiving water from a public drinking-water system. This measure will report the total number of all public water systems that have not had maximum contaminant level (MCL), lead action level, or treatment technique violations.

Source/Collection of Data: Public water system information is gathered during each comprehensive compliance investigation (CCI) of a public water system (PWS) conducted by field staff. Violation data is obtained from the review of chemical and microbiological sample analysis data that is submitted to the TCEQ from accredited laboratories after samples are collected by PWS personnel or by contract sample collectors. CCI reports, as well as chemical and microbiological sample analysis data reports, are kept in the TCEQ Central Records. Population, sample analysis, and violation data are kept in the Safe Drinking Water Information System (SDWIS).

Method of Calculation: Using the SDWIS, the measures will report the number of PWSs that have not had maximum contaminant level, lead action level, or treatment technique MCL violations as described by the Public Drinking Water Standards.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-01.02 Number of drinking-water samples collected

Short Definition: Number of drinking-water samples collected.

Purpose/Importance: Chemical samples are collected from public water systems (PWSs) to protect public health by determining if the PWS is providing water that meets public drinking-water standards to its customers. Samples must be collected in order to be analyzed.

Source/Collection of Data: Chemical samples are collected by PWS personnel, contract sample collectors, or TCEQ regional staff. The numbers are reported to the Water Supply Division on a monthly basis. Original data are kept in the Central Records facility located at TCEQ headquarters. It is also maintained electronically in the Safe Drinking Water Information System (SDWIS). Each reporting period, TCEQ regional staff submits the number of samples collected to the Water Supply Division.

Method of Calculation: The number of chemical samples is set by the requirements of the Public Drinking Water Standards, and the anticipated number is maintained in the SDWIS. Chemical samples collected from PWSs are reported from two sources. The number of chemical samples collected by the Water Supply Division contractor is tracked by the Water Supply Division, while samples collected by TCEQ regional staff will be reported by them to the OCE central office staff on a monthly basis. The number of samples reported will be totaled by OCE central office staff and sent to the Water Supply Division on a quarterly basis.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-02.01 Number of utility rate reviews performed

Short Definition: Number of utility rate reviews performed.

Purpose/Importance: This measure reflects the number of requests from utilities for rate changes reviewed and audits of investor-owned utility rates.

Source/Collection of Data: Using the agency's Water Utilities Database (WUD) system, this measure will report on the number of all utility rate appeals, and applications reviewed that receive administrative approval, are referred to the TCEQ for action, or are dismissed or withdrawn.

Method of Calculation: Using the agency's WUD system, the number of rate reviews performed each quarter are summed and reported to Strategic Planning and Assessment.

Data Limitations: The number of rate applications and appeals received is related to the economic conditions in the state.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-02.02 Number of district applications processed

Short Definition: Number of district applications processed.

Purpose/Importance: This measure reflects the number of major and minor district applications reviewed.

Source/Collection of Data: Using the agency's Water Utilities Database (WUD) system, this measure will

report on the number of all district applications reviewed that receive either administrative approval, are referred to the Commission for action, or are dismissed or withdrawn.

Method of Calculation: Using the agency's WUD system, the number of district applications reviewed each quarter are summed and reported to Strategic Planning and Assessment.

Data Limitations: The number of district applications received is related to the economy and development activity in the state.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 02-01-02.03 Number of certificates of convenience and necessity applications processed

Short Definition: Number of certificates of convenience and necessity applications processed.

Purpose/Importance: This measure reflects the number of water or sewer service area Certificate of Convenience and Necessity applications reviewed.

Source/Collection of Data: Using the agency's Water Utilities Database (WUD) system, this measure will report on the total number of Certificate of Convenience and Necessity applications reviewed that receive either administrative approval, are referred to the Commission for action, or are dismissed or withdrawn.

Method of Calculation: Using the agency's WUD system, the number of Certificate of Convenience and Necessity applications reviewed each quarter are summed and reported to Strategic Planning and Assessment.

Data Limitations: This activity is related to the economy and development activity in the state.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.01 Percent of inspected or investigated air sites in compliance

Short Definition: Percent of inspected or investigated air sites in compliance.

Purpose/Importance: The measure reflects inspection or investigation activity as regulated entities are inspected or investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates of sites following inspections or investigations allows the agency to determine if regulatory assistance, inspection and investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: This information is tracked using CCEDS. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action).

Method of Calculation: The percent of inspected or investigated air sites in compliance is derived by calculating the total number of sites inspected or investigated for compliance with air rules, regulations, and statutes minus the total number of air cases screened and approved for enforcement action, dividing this difference by the total number of sites inspected or investigated for compliance with air rules, regulations, statutes, multiplied by 100.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of the regulated community regarding their ability to comply.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Outcome 03-01.02 Percent of inspected or investigated water sites and facilities in compliance

Short Definition: Percent of inspected or investigated water sites and facilities in compliance.

Purpose/Importance: This measure reflects inspection/investigation activity as regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates following inspections/investigations allows the agency to determine if regulatory assistance, inspection/investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: The enforcement and inspection/investigation information is tracked using CCEDS, and the number of wastewater and water supply facilities is tracked using the Water Utilities Database, TRACS, and the Federal Permit Compliance System. The total number of cases screened and approved for enforcement action does not include occupational certification program activities. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action).

Method of Calculation: The percent of inspected or investigated water sites and facilities in compliance is derived by taking the total number of facilities inspected/investigated for compliance with water rules, regulations, and statutes, including water-rights sites, wastewater treatment facilities, public water supply systems, sludge and septage transporters, beneficial use sites, and livestock and poultry operations; plus the number of wastewater and water supply facilities required to self report and/or conduct chemical analyses; minus the total number of water cases (for the categories described above) screened and approved for enforcement action; and dividing this difference by the total number of facilities inspected/investigated or evaluated for compliance with water rules/regulations/statutes, including self reporting requirements (as described above); multiplied by 100.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of the regulated community regarding their ability to comply.

Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Outcome 03-01.03 Percent of inspected or investigated waste sites in compliance

Short Definition: Percent of inspected or investigated waste sites in compliance.

Purpose/Importance: The measure reflects inspection or investigation activity as regulated entities are inspected or investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates following inspections or investigations allows the agency to determine if regulatory assistance, inspection and investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: This information is tracked using CCEDS. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action).

Method of Calculation: The percent of inspected or investigated waste sites in compliance is derived by calculating the total number of facilities inspected or investigated for compliance with waste rules, regulations, and statutes minus the total number of cases screened and approved for enforcement action, dividing this difference by the total number of facilities inspected or investigated for compliance with waste rules, regulations, and statutes, multiplied by 100. Waste sites include industrial and hazardous waste, municipal solid waste, petroleum storage tank, underground injection control, and radioactive waste sites.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of the regulated community regarding their ability to comply.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.04 Percent of identified noncompliant sites and facilities for which timely and appropriate enforcement action is taken

Short Definition: Percent of identified noncompliant sites and facilities for which appropriate action is taken.

Purpose/Importance: This measure compares enforcement actions that the agency takes during a fiscal year and determines whether they have been taken within appropriate time frames. Timeliness of enforcement processes is important to ensure that the regulated entity returns to compliance as soon as possible.

Source/Collection of Data: Using CCEDS, the Enforcement Division will determine the total number of formal enforcement actions taken during the reporting period and will evaluate whether or not the actions were completed timely. Formal actions include issuance of an order, compliance agreement, or referral to an appropriate agency or division (the EPA, OAG, or Remediation or Field Operations Divisions for Superfund, voluntary cleanup, or emergency removal action), as determined according to agency guidelines. Each of these actions taken will be evaluated to determine whether or not the action was completed within internal agency time frames in order to determine whether appropriate action was taken, using the date of screening as the start date and the date of the order, compliance agreement, or referral as the end date.

Method of Calculation: The percentage will be calculated by taking the total number of cases with actions taken within appropriate time frames against noncompliant facilities divided by the total number of cases with formal action taken, multiplied by 100 to derive a percentage.

Data Limitations: Time frames for completion of enforcement actions involve processes that cannot be solely controlled by the TCEQ. The respondents in these cases can create delays in processing the orders and compliance agreements if they request hearings or if the technical requirements are complex, requiring extensive negotiation.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.05 Percent of investigated occupational licensees in compliance

Short Definition: Percent of inspected or investigated licensees in compliance.

Purpose/Importance: The measure reflects inspection and investigation activity as occupational certification licensees are inspected or investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates following investigations allows the agency to determine if regulatory assistance, investigation, and enforcement programs are effective. Lower compliance rates may indicate a need for increased assistance to the regulated community to ensure that they understand their responsibilities.

Source/Collection of Data: This information is tracked using CCEDS. An enforcement action is defined as issuance of an order, compliance agreement, or referral to the OAG.

Method of Calculation: The percent of inspected licensees in compliance is derived by calculating the total number of licensees inspected or investigated by the Field Operations Support Division and the regional offices plus the number of complaints investigated requiring no additional investigation (Total Investigations) minus the total number of occupational certification cases screened and approved for enforcement action, dividing this difference by the number of Total Investigations (as defined above), multiplied by 100.

Data Limitations: The agency can encourage compliance through regulatory assistance and ensuring that a strong and fair enforcement program exists; however, the TCEQ cannot control the will or financial status of licensees regarding their ability to comply.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.06 Percent of administrative orders settled

Short Definition: Percent of Administrative Orders Settled by the Enforcement Division

Purpose/Importance: Reflects agency effectiveness in quick settlement of enforcement matters.

Source/Collection of Data: This information will be derived from CCEDS.

Method of Calculation: Using computerized searches, the percent of administrative orders settled by the enforcement division will be calculated by determining the total number of administrative orders issued during the fiscal year and the number of those orders that contain a "settlement achieved by enforcement division" date in the database. The number of orders settled by the enforcement division will then be divided by the total number of orders issued for the fiscal year and then will be multiplied by 100.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.07 Percent of administrative penalties collected

Short Definition: Percent of administrative penalties collected.

Purpose/Importance: This measure reflects the success of administrative penalty collection efforts by the agency.

Source/Collection of Data: This measure will be calculated using databases maintained by the Financial Administration Division.

Method of Calculation: Using databases maintained by the Financial Administration Division, this measure will be reported by dividing the total amount of administrative penalty invoices outstanding at the end of the fiscal year by the total amount of administrative penalties invoiced and due for the fiscal year. This calculation × 100 will yield the percent of administrative penalties not collected during the fiscal year. Subtracting this calculation from 100 percent provides the percent of administrative penalties collected during the fiscal year.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: N/A.

Output 03-01-01.01 Number of inspections and investigations of air sites

Short Definition: Number of inspections and investigations completed at regulated air sites.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of inspections/investigations completed for air entities during the reporting period. An inspection/investigation is defined as the evaluation of a regulated entity against a standard and includes all (initial and follow up) compliance investigations/inspections, file reviews, site assessments and agent evaluations. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. The number does not include citizen complaint investigations or emissions events investigations.

Method of Calculation: Each reporting period, Central Office staff retrieves from the Consolidated Compliance and Enforcement Data System (CCEDS) the number of investigations completed in the field offices as well as those completed by city and or county local programs for certain air related activities. An investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-01.02 Number of inspections and investigations of water-rights sites

Short Definition: Number of inspections/investigations completed at regulated water-rights sites.

Purpose/Importance: The measure reflects agency efforts to divide the water of the streams and regulate the controlling works of reservoirs in accordance with the adjudicated water rights.

Source/Collection of Data: Using a manual count of records maintained by the Watermaster Program, this measure is the total number of Watermaster diversion site inspection/investigations performed as a result of a request to divert water.

Method of Calculation: Each reporting period, the Water Availability Division retrieves from the database the number completed by the Watermaster staff..

Data Limitations: None identified.

Calculation Type: Cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 03-01-01.03 Number of inspections and investigations of water sites and facilities

Short Definition: Number of inspections and investigations completed at regulated water sites and facilities.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using data retrieved from the Consolidated Compliance and Enforcement Data System (CCEDS) and data reported by certain regional offices directly to the central office, this measure is calculated by adding the total number of inspections or investigations completed for water entities during the reporting period. An inspection or investigation is defined as the evaluation of a regulated entity against a standard and includes all (initial and follow up) compliance inspections, file reviews, site assessments, and agent evaluations. Water entities include, but are not limited to, wastewater treatment facilities, public water supply systems, sludge applicators or transporters, stormwater facilities (including facilities in the Edwards Aquifer regulated area), aggregate production operations, on-site sewage facilities (OSSFs) (including compliance review audits of OSSF authorized agents), livestock and poultry operations, and municipal utility districts. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. This measure includes OSSF installation and follow-up investigations, as well as Edwards Aquifer Protection Program (EAPP) compliance and follow-up investigations. This measure does not include OSSF or EAPP plan review investigations. since those numbers are included in Output Measure 01-02-02.01. Additionally, this number also does not include citizen complaint investigations.

Method of Calculation: Each reporting period, central office staff retrieves from CCEDS the number of investigations completed in the regional offices for certain activities. An investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in CCEDS. Municipal utility district (MUD) construction inspections or investigations are reported by the following regional offices directly to the central office: Austin, Houston, and Dallas–Ft. Worth. The MUD construction inspections or investigations are added to the number of water site inspections or investigations retrieved from CCEDS each month.

Data Limitations: None identified.
Calculation Type: Cumulative.
New Measure: Yes.
Desired Performance: Above projections.

Output 03-01-01.04 Number of inspections and investigations of waste sites

Short Definition: Number of inspections and investigations completed at waste sites.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of inspections/investigations completed at regulated municipal solid waste (MSW), industrial and hazardous waste (IHW), radioactive material recovery or waste disposal, petroleum storage tank (PST) and Stage II vapor recovery entities during the reporting period.

Investigation is defined as the evaluation of a regulated entity against a standard and includes all (initial and follow up) compliance inspections, file reviews, site assessments and agent evaluations. MSW includes, but is not limited to investigations of generators, storage sites, transporters and processors of waste tire entities and used oil/used oil filter facilities. IHW includes, but is not limited to, investigations of generators, treatment/storage, land disposal, boilers and industrial furnaces (BIF), underground injection control (UIC), Department of Defense/Department of Energy and border warehouses. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. Number does not include citizen complaints investigations.

Method of Calculation: Each reporting period, Central Office retrieves from CCEDS the number of investigations completed in the field offices as well as those completed by Office of Compliance and Enforcement staff, contracted staff, and city and/or county local programs for certain activities. An investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 03-01-01.01 Average time (days) from air, water, or waste inspection to report completion

Short Definition: Average time to complete an inspection/investigation of air, water, or waste sites.

Purpose/Importance: The measure reflects how efficiently the agency completes investigations of air, water, or waste sites. An inspection or investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and the manager's approval date has been reflected in the database. Inspection or investigation is defined as the evaluation of a regulated entity against a standard.

Source/Collection of Data: All inspection and investigation and report-completion data is entered into CCEDS.

Method of Calculation: This measure is derived by calculating the total number of calendar days between the date of an inspection or investigation and the date of completion, divided by the total number of completed inspections or investigations reported during the reporting period. An inspection or investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and management's approval date has been reflected in CCEDS.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 03-01-01.01 Number of citizen complaints investigated

Short Definition: Number of citizen complaints investigated.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of citizen complaints investigated.

Method of Calculation: Each reporting period, the central office retrieves from CCEDS the number of complaints investigated by the agency as well as those investigated by city or county local programs for certain

activities. A complaint is considered investigated when the investigation has been conducted, a report has been written, management has approved, and management's approval date has been reflected in the database.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-01.02 Number of emission events investigations

Short Definition: Number of emissions events investigations.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. An emissions event is any upset event or unscheduled maintenance, startup, or shutdown activity, from a common cause, that results in unauthorized emissions of air contaminants from one or more emissions points at a regulated entity. Potential violations are identified through investigations of reports and records of these emissions. Investigations may include either: an onsite investigation conducted immediately following a major emissions event; a scheduled onsite investigation covering emissions events at the site from the most recent 12-month period; and an in-house investigation of an emissions event.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Database System (CCEDS), this measure is calculated by adding the total number of emissions events investigations. An inspection/investigation is defined as the evaluation of a regulated entity against a standard.

Method of Calculation: During each reporting period, the Central Office retrieves from CCEDS the number emissions events investigations conducted.

Data Limitations: The TCEQ has no control over the number of emissions events that occur.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 03-01-01.03 Number of spill cleanup inspections or investigations

Short Definition: Number of spill cleanup inspections or investigations.

Purpose/Importance: Regulated entities are investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment.

Source/Collection of Data: Using the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of initial, on-site spill incident inspections or investigations conducted. An inspection or investigation is defined as the evaluation of a regulated entity against a standard. Inspections or investigations are conducted to ensure compliance of regulated entities with rules, regulations, and statutes designed to protect human health and the environment.

Method of Calculation: During each reporting period, the central office retrieves from CCEDS the number of initial, on-site spill investigations conducted.

Data Limitations: The TCEQ has no control over the number of spills that occur.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Below projections.

Output 03-01-02.01 Number of environmental laboratories accredited

Short Definition: Number of environmental laboratories accredited according to Texas Water Code 5.801, et seq.

Purpose/Importance: The measure reflects the number of environmental laboratories accredited according to standards adopted by the National Environmental Laboratory Accreditation Conference.

Source/Collection of Data: Each accreditation is documented by a certificate prepared by the Compliance Support Division.

Method of Calculation: Accreditation information is compiled from primary records maintained by division staff.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-02.02 Number of small businesses and local governments assisted

Short Definition: The number of small businesses and local governments assisted includes the following types of direct assistance: answers to hotline inquiries regarding permit and regulatory applicability; site assistance visits; notification of rule changes; outreach activities; industry specific workshops; and government sponsored conferences.

Purpose/Importance: This measure provides an indication of the responsiveness of Small Business and Local Government Assistance (SBLGA) staff to small business and local government inquiries. This measure also indicates pro-active activities provided by SBLGA staff to assist small businesses and local governments.

Source/Collection of Data: The data is collected using an electronic tracking and reporting system maintained by SBLGA staff.

Method of Calculation: A total number is obtained by adding the types of assistance provided to small businesses and local governments as indicated in the above definition.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 03-01-02.01 Average number of days to file the initial settlement offer

Short Definition: Average number of days to file the initial settlement offer through either mailing a proposed order or filing an Executive Director's Preliminary Report and Petition (EDPRP).

Purpose/Importance: Reflects agency efficiency in filing notices notifying violators of the violations alleged and penalties sought.

Source/Collection of Data: This information will be derived from the Enforcement Database.

Method of Calculation: Using computerized searches, the average number of days to file an initial settlement offer will be calculated as the sum of the number of days from assignment of the Enforcement Action Referral (EAR) to the mailing date of the initial proposed order or the filing date of the initial Executive Director's

Preliminary Report and Petition (EDPRP) on a case, divided by the total number of draft orders or EDPRPs. EDPRPs for failed expedited orders will not be counted since the initial proposed orders will already have been counted in this category.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 03-01-02.01 Amount of administrative penalties paid in final orders issued

Short Definition: Amount of administrative penalties required to be paid in final administrative orders issued.

Purpose/Importance: Reflects penalties required to be paid. *Note:* This is not the amount that is paid to TCEQ, but rather the amount that the Orders require to be paid; some may have payment schedules and some may be default orders.

Source/Collection of Data: Using the Enforcement Database, this measure will be reported at the end of the fiscal year by calculating the total penalty amounts required to be paid in final administrative orders issued.

Method of Calculation: This measure will be derived by calculating the total penalty amounts required to be paid in final administrative orders issued.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: N/A.

Explanatory 03-01-02.02 Amount required to be paid for supplemental environmental projects issued in administrative orders

Short Definition: Amount required to be paid for supplemental environmental projects issued in administrative orders.

Purpose/Importance: Reflects money required to be paid or projects required to be conducted in addition to penalty amounts paid in enforcement orders. The supplemental environmental projects are normally designed to benefit the communities or the environment where the violations occurred.

Source/Collection of Data: Using the Enforcement Database, this measure will be reported at the end of the fiscal year for the total dollar amount specified in the Administrative Orders that must be spent on supplemental environmental projects approved by the agency.

Method of Calculation: This measure will be reported at the end of the fiscal year for the total dollar amount specified in the Administrative Orders that must be spent on supplemental environmental projects approved by the agency.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: N/A.

Explanatory 03-01-02.03 Number of administrative enforcement orders issued

Short Definition: Number of administrative enforcement orders issued

Purpose/Importance: Reflects agency enforcement efforts.

Source/Collection of Data: Using the Enforcement Database, this measure will be derived by calculating the number of administrative orders issued.

Method of Calculation: This measure will be derived by calculating the number of administrative orders issued during the reporting period.

Data Limitations: The agency has very limited control over the number of administrative enforcement orders that need to be issued in a given year. This number is determined by the number of violations committed by the regulated community. In addition, finalization of enforcement orders cannot be solely controlled by the TCEQ. Due process of law allows all respondents for enforcement orders the opportunity for hearing. The timing for the hearing is then the decision of the administrative law judge at the State Office of Administrative Hearings. In addition, delays can occur when the technical requirements necessary to achieve compliance are complex, requiring extensive negotiations.

Calculation Type: Cumulative

New Measure: No.

Desired Performance: Below projections.

Output 03-01-03.01 Number of presentations, booths, and workshops conducted on pollution prevention/waste minimization and voluntary program participation

Short Definition: Total number of pollution prevention/waste minimization and voluntary program workshops, booths, and presentations conducted by Small Business and Environmental Assistance staff for promotion of pollution prevention/waste minimization and voluntary program participation.

Purpose/Importance: This measure provides an indication of Small Business and Environmental Assistance staff's ability to conduct outreach and information dissemination of pollution prevention and voluntary program information to Texas businesses and organizations.

Source/Collection of Data: Workshops, booths, and presentations are tracked by Small Business and Environmental Assistance staff, who include workshop, booth, and presentation information in the section's events database. This information is then pulled from the database and compiled in a spreadsheet.

Method of Calculation: The number of workshops, booths, and presentations conducted during each quarter are summed. Fiscal year totals are calculated by adding quarterly totals.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 03-01-03.02 Number of quarts of used oil diverted from improper disposal

Short Definition: Number of quarts of used oil collected for processing instead of potential disposal in a landfill or release to land or water

Purpose/Importance: This number indicates the amount of used oil that, if not collected by the registered collection centers, could otherwise be delivered to landfills or improperly disposed of, potentially causing harm

to human health and the environment. The number is a quantitative measurement of pollution prevention. This number represents the total volume of used oil, expressed in quarts, that was reported to the agency by used oil collection centers. The collection centers collect and prepare the oil for recycling before reuse or resale to the public.

Source/Collection of Data: Using an automated agency system maintained by the Permitting and Registration Support Division, this measure tracks the quantities of used oil reported annually by used oil collection centers. The report is due on January 25 of each year and reflects activities for the previous year. No information is received during the first quarter and the totals are collected from forms received during the second quarter and late filings during the third quarter.

Method of Calculation: Performance data are obtained from querying automated agency systems for the number of quarts of used oil collected for processing.

Data Limitations: The TCEQ has no control over the number of quarts of used oil received by collection centers. Therefore, the number may fluctuate and there may be a wide range in this measure from year to year. TCEQ staff continues to work with the collection centers to ensure that reported values are accurate and representative of actual oil collected.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-03.01 Tons of hazardous waste reduced as a result of pollution prevention planning

Short Definition: This measure indicates the level of hazardous waste reduction by Texas facilities and provides information regarding the agency's efforts to reduce toxics released in Texas.

Purpose/Importance: This information is not measured by any other program at the TCEQ and provides information that is independent of economic factors such as production.

Source/Collection of Data: The source of the data is the information provided by facilities on the annual progress report required by Waste Reduction Policy Act (WRPA). This information is maintained in an Oracle database.

Method of Calculation: The measure is calculated by adding up the source reduction number from all facilities reporting.

Data Limitations: Data is dependent on accurate and timely reporting by facilities. In addition, the data reported reflects actual values from the prior year. For example, data reported in September 2000 will represent data received from industry in July 2000, which is for their calendar year 1999.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-03.02 Tons of waste collected by local and regional household hazardous waste collection programs

Short Definition: The tons of waste collected through household hazardous waste collection programs, reported annually by the programs to the TCEQ.

Purpose/Importance: This measure provides data on how much household hazardous waste and other waste was collected and properly disposed of in Texas through household hazardous waste collection programs, thus reducing the impact on the environment.

Source/Collection of Data: Reports from collection programs. This data reports results of collection programs as submitted by entities with programs. Staff maintains the data in a spreadsheet database.

Method of Calculation: Summation of all reports submitted for related programs in Texas.

Data Limitations: Data quality is limited to quality of reports submitted to the agency.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 03-01-03.03 Number of registered waste tire facilities and transporters

Short Definition: Number of Registered Waste Tire Facilities and Transporters.

Purpose/Importance: The number depicts the quantity of regulated facilities involved in scrap tire management, who have complied with the agency's rules and provide reports on tire management and recycling. The number can also indicate any trends in scrap tire management, such as increase or decrease in number of facilities from year to year.

Source/Collection of Data: The number is obtained from either the Tires Management System (TMS) or an alternate database file from TMS. This number represents the universe of facilities that either transport, store, process, recycle or burn for energy recovery, scrap tires.

Method of Calculation: TCEQ Dallas/Ft. Worth Region registers and maintains data on these facilities. The number is a sum total of all entries in the database.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.01 Percent of leaking petroleum storage tank sites cleaned up

Short Definition: The percentage of leaking petroleum storage tank sites at which no further corrective action is required, compared to the total population of known leaking petroleum storage tank sites.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up leaking petroleum. storage tank sites relative to the total population of known leaking petroleum storage tank sites.

Source/Collection of Data: This measure uses an agency database maintained by the Remediation Division.

Method of Calculation: Using an agency database maintained by the Remediation Division, the number of leaking petroleum storage tank sites issued "no further action" letters is divided by the total number of reported leaking petroleum storage tank sites, multiplied by 100 to derive a percentage.

Data Limitations: Most "no further action" letters are issued upon a written request from responsible parties and the agency has limited control when these requests are submitted. Therefore, the percentage reported may represent fewer sites than would otherwise actually qualify for "no further action" status.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.02 Total number of Superfund remedial actions completed

Short Definition: The number of state and federal Superfund sites with completed remedial actions since program inception.

Purpose/Importance: This measure reflects long-term agency efforts to clean up Superfund sites.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division the total number of state and federal Superfund sites since program inception attaining completion of the remedial action is calculated.

Method of Calculation: The total combined number of state and federal Superfund sites with completed remedial actions since program inception. The remedial action is considered complete when a site is deleted from the State Registry or the National Priorities List, upon the completion of construction, or upon documentation that no further action is needed.

Data Limitations: The agency has limited control over the federal Superfund program listings, progression of federal site cleanups and deletions. The progression of sites through the federal Superfund program is directly related to federal funding issues, scheduling, and the final approval of submittals, which are reviewed by the EPA. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also affect the progress of Superfund sites that are federal facilities.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.03 Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse

Short Definition: The percentage of voluntary and brownfield properties/sites returned to a productive use within a community.

Purpose/Importance: This percentage provides a measure of the overall efficiency of the VCP to meet the goals of applicants in receiving certificates of completion. The percentage derived is indicative of the trend of the willingness of site owners/operators and prospective purchasers to voluntarily address their contaminated sites through the VCP and the adequacy of the VCP in meeting the review deadlines necessary for completing property transactions.

Source/Collection of Data: From information collected in a database, adding the total number of certificates of completion issued since the inception of the program and the total number of VCP applications submitted by site owners/operators and prospective purchasers since the inception of the program.

Method of Calculation: The percentage is obtained by dividing the total number of VCP certificates of completion issued since the inception of the program by the total number of VCP applications received since the inception of the program, multiplied by 100.

Data Limitations: The TCEQ has no control over the number of site owners/operators and prospective purchasers who voluntarily enter the VCP since their choice controls the number of sites that enter the VCP and the completion of the tasks necessary for issuance of a certificate of completion.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 04-01.04 Percent of industrial solid and municipal hazardous waste facilities cleaned up

Short Definition: Percent of industrial solid and municipal hazardous waste facilities cleaned up.

Purpose/Importance: This measure tracks the achievement of final cleanup goals at industrial solid waste and municipal hazardous waste facilities. It evaluates the reduction of the number of contaminated facilities across the state, and is a measure of the protection of human health and the environment.

Source/Collection of Data: The data source is correspondence sent out from the Industrial and Hazardous Waste Corrective Action Program. Correspondence and the facility status are logged in a database maintained by the Remediation Division.

Method of Calculation: The number of facilities with no further action in the Industrial and Hazardous Waste Corrective Action Program is divided by the total number of reported facilities in the program, and then multiplied by 100. The percentage is reported annually, at the end of the fiscal year.

Data Limitations: This measure involves review and approval of documents required by agency orders, permits, and compliance plans, as well as self-implemented cleanup allowed by the regulations. The agency does not have control over the number of cleanup projects, the number of documents submitted, or the types or quality of documentation submitted to pursue self-implemented cleanups.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-01.01 Number of petroleum storage tank self-certifications processed

Short Definition: Number of petroleum storage self-certifications processed.

Purpose/Importance: The measure reflects agency workload in processing PST self-certifications.

Source/Collection of Data: Using an automated agency data system maintained by the Permitting and Registration Support Division, this measure will track the number of owner/operator self-certifications processed in Texas each year.

Method of Calculation: The automated agency systems will be queried for the number of self certifications processed.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-01.02 Number of emergency response actions at petroleum storage tank sites

Short Definition: The number of leaking petroleum storage tank sites to which a state lead contractor is dispatched to address an immediate threat to human health or safety (e.g., an explosion or fire hazard, vapor impacts to buildings, or surface water impacts).

Purpose/Importance: This measure provides an indication of the number of leaking petroleum storage tank sites that have an emergency situation requiring action by the agency to protect human health or safety.

Source/Collection of Data: Using an agency database maintained by the Remediation Division, the number of leaking petroleum storage tank sites to which a state lead contractor is dispatched to address an emergency situation is tracked.

Method of Calculation: At the end of each quarter, the database is used to arrive at a total number of sites to which a state lead contractor was dispatched to address an emergency situation during that quarter. The total for each quarter is added to the total for any previous quarters during that fiscal year, to come up with a cumulative total of sites addressed during that fiscal year.

Data Limitations: Most response actions to leaking petroleum storage tank emergency situations are performed on a demand basis. Therefore, the number of sites that will require emergency response actions is unpredictable.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Output 04-01-01.03 Number of petroleum storage tank cleanups completed

Short Definition: The number of leaking petroleum storage tank sites at which no further corrective action is required.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up leaking petroleum storage tank sites during the reporting period.

Source/Collection of Data: This measure uses an agency database maintained by the Remediation Division.

Method of Calculation: Using an agency database maintained by the Remediation Division, the number of leaking petroleum storage tank sites issued "no further action" letters during the reporting period is calculated.

Data Limitations: Most "no further action" letters are issued upon a written request from responsible parties and the agency has limited control when these requests are submitted. Therefore, since the number of these letters issued during a reporting period is primarily determined by the number submitted by the responsible parties, the reported number may represent fewer sites than would otherwise actually qualify for "no further action" status.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 04-01-01.01 Average time (days) to authorize a state lead contractor to perform corrective action activities

Short Definition: Average number of days for the agency to authorize, through a work order, a state lead contractor to perform corrective action activities at LPST sites.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up state lead LPST sites.

Source/Collection of Data: This measure uses an agency database maintained by the Remediation Division.

Method of Calculation: Using an agency database maintained by the Remediation Division, the number of state lead work-order proposals received is tracked, the number of days to review and respond to each proposal through issuance of a work order is recorded, and the average response time is calculated for the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Below projections.

Output 04-01-02.01 Number of immediate response actions completed to protect human health and the environment

Short Definition: The number of immediate response actions completed to protect human health and the environment.

Purpose/Importance: This measure reflects the number of immediate response actions completed by the Remediation Division in an effort to protect human health and the environment and prevent sites from progressing into the Superfund program.

Source/Collection of Data: Using an agency database maintained by the Remediation Division, this measure will report the total number of incidents where immediate response actions were completed to protect human health and the environment.

Method of Calculation: At the end of a reporting quarter, a program database query will report the number of immediate response actions completed for that quarter. The immediate response action may be completed at the conclusion of field work (e.g., soil excavation); when the site is proposed to the State Registry or National Priorities List (e.g., for private water-well filtration system operation); or when the state participates in cost sharing of a complete response action by a federal agency. Additionally, the fiscal-year cumulative total will be reported each quarter in the year-to-date performance.

Data Limitations: Potential factors affecting this measure may be property access, lack of sites requiring response actions, budgetary or funding constraints, a determination that an incident is not time critical, the magnitude of required response activities, and community involvement.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Below projections.

Output 04-01-02.02 Number of Superfund site assessments

Short Definition: The number of potential Superfund sites that have undergone an eligibility assessment for either the state or federal Superfund program.

Purpose/Importance: This measure provides an indication of the Remediation Division efforts to prioritize and assess sites under Superfund program eligibility criteria during the reporting period.

Source/Collection of Data: Using an agency database maintained by the Remediation Division, the number of Superfund program eligibility assessments completed are tracked by completion date.

Method of Calculation: At the end of each quarter, a database query is conducted to arrive at a total number of Superfund program eligibility assessments completed during that quarter. The total for each quarter is added to the total for any previous quarters during that fiscal year to determine a cumulative total of eligibility assessments completed during that fiscal year.

Data Limitations: Eligibility assessments are conducted on sites referred to the Site Discovery and Assessment Program by various entities (consisting of but not limited to the U.S. Environmental Protection Agency, TCEQ Enforcement and Field Operations Emergency Response Programs, the State Attorney General's Office, and bankruptcy courts). The number of eligibility assessments that are completed each fiscal year is dependent on the number and complexity of referrals received by the program. Time critical factors may require the diversion of staff resources to immediate response actions rather than assessment activities.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.03 Number of voluntary and brownfield cleanups completed

Short Definition: The number of voluntary cleanup and brownfields sites that have completed necessary response actions through either the removal or control of contamination to levels that are protective of human health and the environment.

Purpose/Importance: Upon completion of response action(s), a certificate of completion is given to the applicant which states that all nonresponsible parties are released from all liability to the state for any past contamination. This liability protection provides significant incentives for both site owners/operators and prospective purchasers to voluntarily bring contaminated sites into the Voluntary Cleanup Program (VCP) and complete necessary cleanups.

Source/Collection of Data: Site owners/operators or prospective purchasers voluntarily submit an application and an agreement to the VCP for program eligibility evaluation. The applicant's goals for site cleanup, including their schedule for conducting necessary site investigation and cleanup are reviewed by VCP staff. Upon completion of site cleanup, VCP staff approve a final report based on the applicant's meeting all of the necessary regulatory standards for the site. Once it has been determined that the site is protective of human health and the environment, a certificate of completion is issued to the applicant. The number of certificates of completion issued each quarter is reported in this performance measure.

Method of Calculation: The Voluntary Cleanup Program database is queried for the quarterly and cumulative totals of completion certifications issued for the fiscal year.

Data Limitations: The TCEQ has no control over the number of site owners/operators and prospective purchasers who voluntarily enter the VCP since their choice controls the number of sites that enter the VCP and the completion of the tasks necessary for issuance of a certificate of completion.

Calculation Type: Cumulative

New Measure: No

Desired Performance: Above projections.

Output 04-01-02.04 Number of Superfund sites in Texas undergoing evaluation and cleanup

Short Definition: The combined number of Superfund sites in Texas that are undergoing evaluation and cleanup activities in the state and federal Superfund process.

Purpose/Importance: Reflects the combined number of state and federal Superfund sites in Texas that are undergoing remedial investigation, feasibility study, remedial design, or remedial action activities and progressing toward completion of the remedial action and delisting from the Texas Registry and the National Priorities List.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division, data will be collected to reflect the combined number of state and federal Superfund sites in Texas that are undergoing evaluation and cleanup.

Method of Calculation: Database query.

Data Limitations: The agency has limited control over the federal Superfund program listings or the progression of federal site cleanups and deletions. The progression of sites through the federal Superfund program is directly related to federal funding issues, scheduling, and the final approval of submittals, which are reviewed by the EPA. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also affect the progress of Superfund sites that are federal facilities. Additionally, the agency cannot accurately predict how many federal sites will be discovered and added to the program during any given year. Since

Superfund sites are abandoned or inactive sites, each site is unique and has inherent unknowns (e.g., the nature and extent of the contamination problems) to be investigated before a remedy can be formulated.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.05 Number of Superfund remedial actions completed

Short Definition: The combined number of state and federal Superfund sites that completed remedial actions during a reporting period.

Purpose/Importance: Reflects the combined number of state and federal Superfund sites in a reporting period no longer posing an unacceptable risk to human health or the environment due to the completion of remedial actions.

Source/Collection of Data: A program database maintained by the Remediation Division calculates the combined number of state and federal Superfund sites attaining remedial action completion status in a reporting period.

Method of Calculation: A program database query will report the number of state and federal Superfund sites that completed remedial actions for that quarter. The fiscal year cumulative total will be reported each quarter in the year-to-date performance. The remedial action is considered complete when a site is deleted from the State Registry or National Priorities List, upon the completion of construction, or upon documentation that no further action is needed. Completion of remedial action does not include post-completion care of the remedy, such as maintenance of treatment systems and on-site waste containment, long-term groundwater monitoring, or maintenance of site security.

Data Limitations: The agency has limited control over the federal Superfund program listings or the progression of federal site cleanups and deletions. The progression of sites through the federal Superfund program is directly related to federal funding issues, scheduling, and the final approval of submittals, which are reviewed by the EPA. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also affect the progress of Superfund sites that are federal facilities. Since Superfund sites are abandoned or inactive sites, each site is unique and has inherent unknowns that may delay attainment of the projected remedial action completion date.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.06 Number of Dry Cleaner Remediation Program (DCRP) site assessments Initiated

Short Definition: The number of Dry Cleaner Remediation Program site assessments initiated. Site assessments are considered initiated upon the issuance of the first work order on the site.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up known dry-cleaning facilities contaminated by dry-cleaner solvents.

Source/Collection of Data: The Dry Cleaner Remediation Program database, maintained by the Remediation Division, will contain DCRP site data, including site assessment data.

Method of Calculation: The total number of site assessments initiated by the Dry Cleaner Remediation Program will be determined from the program's database. Quarterly and year-to-date totals will be generated for specific time periods as required by reporting schedules.

Data Limitations: The TCEQ has no control over the number of eligible dry-cleaner sites applying to the Dry Cleaner Remediation Program, since their choice controls the number of sites that enter the DCRP and the completion of tasks necessary to initiate site assessments.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-02.07 Number of Dry Cleaner Remediation Program (DCRP) site cleanups completed

Short Definition: The number of Dry Cleaner Remediation Program (DCRP) sites that have had necessary response actions completed through either the removal or control of contamination to levels that are protective of human health and the environment.

Purpose/Importance: This measure reflects the agency's efforts to clean up known eligible dry-cleaning sites contaminated by dry-cleaner solvents.

Source/Collection of Data: The Dry Cleaner Remediation Program database, maintained by the Remediation Division, contains all program applicants and associated dry-cleaner facility data.

Method of Calculation: The DCRP database is queried for the quarterly and yearly totals of DCRP sites that have been issued "no further action" letters.

Data Limitations: The TCEQ has no control over the number of DCRP applications received. Dry-cleaner sites may or may not be deemed eligible for DCRP assessment and cleanup activities. The DCRP is required to investigate the nature and extent of the contamination for each site. Therefore, assessment and cleanup may vary depending on unique site conditions. In addition, the TCEQ is required to give consideration to sites that pose a higher relative risk to human health and the environment.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Efficiency 04-01-02.01 Average time (days) to process Dry Cleaner Remediation Program applications

Short Definition: Texas Health and Safety Code, Chapter 374, mandates that the agency's review and ranking of applications to the Dry Cleaner Remediation Program is not to exceed 90 days.

Purpose/Importance: This measure provides the average number of days for the agency to process Dry Cleaner Remediation Program applications.

Source/Collection of Data: This measure is calculated using the Dry Cleaner Remediation Program database maintained by the Remediation Division.

Method of Calculation: Using the Dry Cleaner Remediation Program database, the number of program applications received is tracked, the number of days to review and rank each application is recorded, and the average review and ranking time is calculated for the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 04-01-02.01 Number of potential Superfund sites to be assessed

Short Definition: The number of potential Superfund sites that have not undergone an eligibility assessment for either the state or federal Superfund program.

Purpose/Importance: At fiscal year end, this measure provides an indication of the number of known sites that are to be prioritized and assessed for Superfund eligibility in the subsequent fiscal year(s).

Source/Collection of Data: A program database query is conducted by the Remediation Division to determine the total number of known sites that have not undergone an eligibility assessment under Superfund program eligibility criteria.

Method of Calculation: At the end of each fiscal year, a program database is queried to determine the total number of site assessments that were completed during the fiscal year. This number is subtracted from the total number of known sites in the program database at the end of the fiscal year to determine the number of sites that have not undergone an eligibility assessment for either the state or federal Superfund program.

Data Limitations: Eligibility assessments are conducted on sites referred to ~~us~~ the Remediation Division by various entities (consisting of but not limited to the U.S. Environmental Protection Agency, TCEQ Enforcement and Field Operations Emergency Response Programs, and the State Attorney General's Office, and bankruptcy courts). The number of eligibility assessments that are to be conducted each fiscal year is dependent on the number of referrals received by the program.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 04-01-02.02 Number of state and federal Superfund sites

Short Definition: Number of state and federal Superfund sites.

Purpose/Importance: Reflects the number of state and federal Superfund sites.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division of the Office of Compliance and Enforcement, the number of federal Superfund sites for which minimum hazard ranking scores have been determined and have been proposed for the National Priorities List (NPL) since program inception and the number of state Superfund sites for which minimum hazard ranking scores have been determined and have been proposed for the State Registry since program inception.

Method of Calculation: Database query.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 04-01-02.03 Number of state and federal Superfund sites in post-closure care (O&M) phase

Short Definition: The combined number of Superfund sites in Texas that require state funding for continued operation and maintenance (O&M) activities.

Purpose/Importance: Reflects the combined number of state and federal Superfund sites in Texas that have completed the remedial action process and now require continued state funding to ensure that the remedy remains effective during post-completion care. Activities may include maintenance of treatment systems and on-site waste containment, long-term groundwater monitoring, and maintenance of institutional controls or site security.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division, data will be collected to reflect the combined number of state and federal Superfund sites that are in a post-closure phase.

Method of Calculation: Database query.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Explanatory 04-01-02.04 Number of Dry Cleaner Remediation Program (DCRP) eligible sites

Short Definition: The number of Dry Cleaner Remediation Program sites that have been ranked, prioritized, and evaluated for corrective action.

Purpose/Importance: This measure provides an indication of the agency's efforts to clean up known dry-cleaning facilities contaminated by dry-cleaner solvents.

Source/Collection of Data: The Dry Cleaner Remediation Program database, maintained by the Remediation Division, will contain DCRP site data.

Method of Calculation: The total number of eligible Dry Cleaner Remediation Program sites prioritized and added to the DCRP database. Quarterly and year-to-date totals will be generated for specific time periods as required by reporting schedules.

Data Limitations: The TCEQ has no control over the number of eligible dry-cleaner sites applying to the Dry Cleaner Remediation Program, since their choice controls the number of sites that enter the DCRP.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.01 The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact

Short Definition: The interstate Canadian River Commission will complete an annual accounting of water stored in each state to determine compact compliance. The accounting of water stored in Texas' reservoirs will be used to determine the percent entitlement of water that Texas receives. Due to drought conditions since 2000, Texas stores approximately 100,000 acre-feet annually. The accounting will be completed during the third quarter of the following fiscal year, and will be for the previous calendar year.

Purpose/Importance: The measure is intended to show the extent to which Texas is receiving its share of waters as apportioned by the compact, and serves as an indicator of New Mexico's compliance with the terms of the compact. Continued performance of less than target could indicate that New Mexico has not met its delivery obligation for that year and Texas did not receive its equitable share. Performance of less than target could result in Texas initiating legal proceedings or action, and can serve as an indicator of increased resource needs to rectify any under-delivery. Occasional intermittent performance of less than target could be the result of lower-than-normal precipitation conditions. Precipitation conditions will need to be monitored to determine if a compact violation has occurred.

Source/Collection of Data: Annual reports of water storage as presented to the Canadian River Commission at its annual meeting.

Method of Calculation: This measure is calculated by dividing the actual amount of water stored in Texas' reservoirs (primarily Lake Meredith and Palo Duro Reservoir) by 100,000 acre-feet and converting to a percentage. The 100,000 acre-feet is the average amount of water Texas has in storage during recent years and with New Mexico complying with the compact.

Data Limitations: The accounting is for the previous calendar year, therefore information reported in a given year indicates actual performance for the prior calendar year.

Calculation Type: Non-cumulative.

New Measure: Yes. Due to changes in acre-feet drought projections.

Desired Performance: Above projections.

Outcome 05-01.02 The percentage received of Texas' equitable share of quality water annually as apportioned by the Pecos River Compact

Short Definition: Using the water accounting report of the Pecos River Master and approved by the U.S. Supreme Court, water delivered to Texas will be computed. The water received, including any current credits of past over-deliveries of water, will be divided by the actual amount of water New Mexico is required to deliver under the terms of the compact, as determined by the water accounting report. The accounting of water delivered to Texas is computed during the fourth quarter and will be for the previous calendar.

Purpose/Importance: Measure is intended to show the extent to which Texas is receiving its share of waters as apportioned by the compact, and serves as an indicator of New Mexico's compliance with compact terms. Performance of less than 100 percent in any given year indicates that New Mexico has not met its delivery obligation for that year and that Texas did not receive its equitable share. Performance of less than 100 percent could result in Texas initiating legal proceedings/action, and can also serve as an indicator of increased resource needs to rectify under-delivery.

Source/Collection of Data: Annual water accounting report prepared by the Pecos River Master and approved by the U.S. Supreme Court.

Method of Calculation: Measure is calculated by dividing the actual amount of water received by Texas, including any current credits of past over-deliveries of water (as determined by the annual accounting), by the amount of water New Mexico was required to deliver (as determined by the annual accounting) and converting to a percentage.

Data Limitations: Accounting of water is conducted by the River Master and Supreme Court during the fourth quarter. The accounting is for the previous calendar year; therefore, information reported in a given year indicates actual performance for the prior year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.03 The percentage received of Texas' equitable share of quality water annually as apportioned by the Red River Compact

Short Definition: Using the reports of the engineering and legal committees of the interstate commission, water shortages to Texas' users will be evaluated. If no shortages exist, Texas has received 100 percent of its equitable share. As used in this measure, "equitable share" is defined as lack of water shortages.

Purpose/Importance: Measure is intended to show whether Texas' users of the Red River have experienced any water shortages. Because the quantity of water of the Red River is plentiful and is usually not an issue, a formal accounting of water deliveries to each state has not yet been initiated by the commission. Due to these factors, at this time it is more meaningful to assess whether needs of Texas' users of the Red River are being met, rather than whether each state is meeting its delivery obligation (as in the measures for the Pecos and Rio Grande). Performance of less than 100 percent in any given year indicates that shortages have been experienced and will serve as an indicator that rules for more reaches must be developed and more formal accounting procedures must be implemented.

Source/Collection of Data: Reports prepared by the engineering and legal committees of the interstate commission.

Method of Calculation: Measure is calculated by determining if there have been any water shortages to Texas' users. Engineer advisors from each state meet annually to discuss water use related to the compact and to identify any shortages.

Data Limitations: The Red River Compact Commission has not initiated formal accounting of water deliveries to each state, therefore "water shortages" is used as a proxy for determining whether Texas has received it's equitable share of waters under the terms of the compact. To date, there have been no water shortages and performance has been 100 percent. If shortages occur, and once the commission approves rules for the basinwide accounting, a formal water accounting will commence. Reports used in calculating this measure will be completed after the commission's annual meeting, usually in the third quarter. Reporting will be on an annual basis for the previous calendar year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.04 The percentage received of Texas' equitable share of quality water annually as apportioned by the Rio Grande River Compact

Short Definition: Using the water accounting report prepared by the engineer advisors and approved by the Commission, water delivered to Texas will be computed. The water delivered, including any current credits or debits of past over/under-deliveries allowable under the compact, will be divided by the actual amount of water Colorado and New Mexico are required to deliver under the terms of the compact, as determined by the water accounting report. The accounting of water delivered to Texas is computed during the third quarter and will be for the previous calendar year.

Purpose/Importance: Measure is intended to show the extent to which Texas is receiving its share of waters as apportioned by the compact, and serves as an indicator of Colorado's and New Mexico's compliance with compact terms. Performance of less than target in any given year may indicate that the compact signatories have not met their delivery obligation for that year and that Texas did not receive it's equitable share. Performance of less than target could result in Texas initiating legal proceedings/action, and can also serve as an indicator of increased resource needs to rectify underdelivery.

Source/Collection of Data: Annual water accounting report prepared by the engineer advisors and approved by the Commission.

Method of Calculation: Measure is calculated by dividing the actual amount of water received by Texas, including any current credits or debits of past over/under-deliveries allowable under the compact (as determined

by the annual accounting), by the amount of water the signatory states were required to deliver (as determined by the annual accounting), and converting to a percentage.

Data Limitations: Accounting of water is conducted at the annual meeting (3rd quarter) of the Commission. The accounting is for the previous calendar year, therefore information reported in a given year indicates actual performance for the prior year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 05-01.05 The percentage received of Texas' equitable share of quality water annually as apportioned by the Sabine River Compact

Short Definition: Using the water accounting of water diversions published in the annual report of the Sabine River Compact Administration, the acre-feet of water diverted by Texas will be compared to the historical average for the last five years.

Purpose/Importance: Measure shows whether Texas is receiving it's equitable share of quality water from the Sabine River. As used in this measure "equitable share" means that Texas water use, did not exceed the maximum allowed under the compact (i.e., that sufficient water was available to meet the water needs of Texas users). Water quantity on the Sabine is plentiful. Texas and Louisiana may each use 50 percent of the waters, however, to date neither state uses the full amount to which it is entitled. This measure can also serve to indicate whether diversions are increasing over prior years (indicated when percentage reported exceeds 100 percent), and indirectly, whether the amount of excess water available is diminishing. A sustained increase in water diversions may indicate the need for formal accounting procedures.

Source/Collection of Data: Annual report of the Sabine River Compact Administration.

Method of Calculation: Measure is calculated by dividing the actual amount of water diversion by the historical average of diversions for the last five years.

Data Limitations: The Sabine River Compact Commission has not initiated formal accounting of water deliveries to each state. As a result, amount of water diverted is one of the few indicators (or proxies) available for use in calculating "Percent received of Texas' equitable share." The commission does not control water usage (diversions). Reporting will be on an annual basis for the previous calendar year.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

TCEQ Workforce Plan, Fiscal Years 2013–2017

This document is also provided separately to the State Auditor's Office.

Note: Figure E.1 and Table E.4 include data for the Chief Engineer's Office (CEO). The CEO was dissolved and its components reallocated, effective June 1, 2012.

Key Factors Facing the Agency

During the next five years, the TCEQ expects challenges as it fulfills its mission and goals. Key economic and environmental factors affecting the agency's workforce include turnover; retention of qualified, experienced employees; and an aging workforce. Recent economic conditions and high unemployment have kept the TCEQ's turnover rate relatively low. Typically, during these climates, working for governmental agencies is seen as more attractive and applicant pools increase. However, turnover has increased slightly as it appears that the economy is slowly recovering.

The ability to compete for highly skilled applicants, particularly in hard-to-fill occupations, will prove critical in our efforts to maintain a diverse and qualified workforce necessary for the agency to carry out its mission. The attractive benefits and retirement package afforded state employees will likely be altered to address current funding shortfalls. Although it is unclear at this point what changes may be made, it is likely that any changes will affect our ability to recruit applicants and retain staff.

The TCEQ does not expect significant changes in its mission, strategies, or goals over the next five years, but it does recognize the need to adapt readily to any changes required by legislation. Any new state and federal requirements will be demanding in light of budget and FTE reductions and will likely point to a need to rely more heavily on program changes, process redesign, and technological advancements.

Retirement and Attrition

The departure of employees due to retirement and other reasons is, and will continue to be, a critical issue facing the TCEQ. Within the next five years, 38 percent of the TCEQ's workforce will be eligible to retire, with almost 19 percent eligible to retire by the end of fiscal 2012.

Likewise, turnover is increasing. Although well below the state average in this regard, the TCEQ experienced more than a 2 percent increase in turnover in fiscal 2011–with voluntary separations, other than retirement, making up 63 percent of total turnover. This potential loss of organizational experience and institutional knowledge poses a significant need for continued careful succession planning for key positions and leadership roles.

An ongoing focus on organizational development and training will also be required. Training and mentoring emerged as the primary strategy identified by agency offices to address skill gaps due to retirements, with hiring methods ranking second.

Table E.1 demonstrates the projected increases in the number of employees eligible to retire from fiscal 2012 through fiscal 2017. The TCEQ estimates that approximately 1,008 employees (38.2 percent) will become eligible to retire by the end of fiscal 2017.

Table E.1. Projection of TCEQ Employees Eligible for Retirement, FYs 2012–2017

Fiscal Year	Projected Retirements	Percent of Total Agency Headcount (2,641)
2012	491	18.6
2013	604	22.9
2014	719	27.2
2015	801	30.3
2016	897	34.0
2017	1,008	38.2

Data Source: Human Resources Information System, as of 1/30/12.

Retirement of the agency's workforce at this level could significantly affect the agency's ability to deliver programs and accomplish its mission.

New and Changing Requirements and Initiatives

New federal and state requirements, as well as internal initiatives, will continue to have an agency-wide impact. Offices may be required to change and modify, eliminate, or add programs, processes, and procedures. Also, as a means to provide more timely data, the agency's use of the Web to report and receive information is expanding.

Among other expected program changes, mandates, and initiatives are the following:

- Increased workload due to changing National Ambient Air Quality Standards (NAAQS) for the six criteria pollutants, growing federal and state requirements, and constant changes in the air quality field due to new regulations and technologies bring new and unique technical and policy issues for resolution.
- State implementation plan (SIP) revision requirements are increasing with newly defined mandates. SIP revision development is becoming more complex and the technical requirements are expanding. Developing and coordinating SIP revisions requires intimate knowledge of agency procedures and federal regulations as well as computing and analytical abilities.
- Workloads for the Tax Relief for Pollution-Control Property and the Emissions Banking and Trading programs will also increase with expanded federal and state regulations for environmental protection.
- Proposed revisions of the ozone and sulfur dioxide (SO_2) standards will have a direct impact on workload, as each of these new nonattainment areas, and potentially all SO_2 maintenance areas, will require SIP development.
- Texas will likely be designated nonattainment for pollutants other than ozone within the 2013 through 2017 time frame. In addition, it is anticipated that with revised ozone NAAQS will come further ozone nonattainment area designations, with each requiring SIP revision development.
- The Implementation Grants Section will continue to increase its workload due to the additional 1,000 to 1,500 contracts that enter into the monitoring portion of the program each biennium. These contracts are in addition to the over 8,000 contracts that are currently being monitored.
- Responding to citizen complaints, investigating compliance with applicable air and water regulations, and educating regulated entities continues to be a challenge.
- Additional resources will be needed for ongoing deployment of air-monitoring stations as required by federal or state guidelines or in response to citizen concerns and the protection of human health. Long-term special monitoring projects have increased, increasing the workload for staff involved in reviewing monitoring plans and data, data retrieval, public postings, and station deployment.
- An increased reliance on federal funding for programs, which may require a more comprehensive quality-assurance program, will increase the workload for quality-assurance specialists.
- The agency continues to refine processes and procedures for disaster response, including hurricane preparedness activities. The TCEQ is assisting public water systems in the preparation of emergency plans that will allow them to provide safe drinking water during the recovery phase following a natural disaster.
- House Bill 2694 of the 82nd Legislature (2011, Regular Session; the TCEQ Sunset Bill) affected the Office of Public Interest Counsel (OPIC). Texas Water Code 5.274(b) provides that the counsel may obtain and use outside technical support to carry out its functions under this code, which would greatly enhance the effectiveness of OPIC. However, the office has not been able to hire this technical support due to budgetary constraints; additional funding would be required.

- The agency is handling increased news-media contacts, due to the changing nature of online media outlets. Most news organizations maintain web sites that are updated 24 hours a day, which means around-the-clock media contacts with the agency.
- The TCEQ continues to promote waste reduction and recycling programs, with ongoing implementation of the computer-recycling program, and development and implementation of the new television-recycling program.
- Agency staff strives to effectively communicate technical and complex environmental quality and natural resource issues of the agency to the state's leadership, elected officials, and stakeholders.
- Developing effective working relationships with new members of the state legislature during a time of significant turnover in officeholders is vital to the TCEQ and its executive management, as is providing timely and accurate analysis of legislation affecting the agency.
- Massive growth and technological advancement in the oil and gas industry continues to result in substantial workload increases. Air authorizations have increased by over 170 percent within the last five years. An estimated 14,000-plus regulated entities will need to authorize their maintenance, start-up, and shutdown (MSS) activities by January 2013. Streamlining activities have been implemented to address this anticipated increase in workload.
- Should drought conditions persist or reoccur, there will be a significant impact to applicable agency programs.

Information Technology

To maintain and enhance the agency's level of service, respond to increasing customer demands and expectations, and implement legislative changes, the TCEQ must prepare for a number of issues in the area of information technology (IT). They include:

- Modifying existing database and reporting capabilities as well as new initiatives to allow greater public access to agency records will require large commitments in funding and manpower resources.
- Developing a web-based application for reporting performance measures will increase efficiencies.
- As SD (standard definition) becomes obsolete, the agency will have to produce content in HD (high definition) and provide greater amounts of digital content for use on the TCEQ websites for training, public education, and other information resources.
- In response to an increased demand for real-time data, additional staff will require training on applicable technology in the areas of environmental and compliance monitoring.
- Maintaining and improving online access and navigation (internally and externally) will allow the agency to provide information through increasing and varied access points, such as mobile devices and social media.
- The Petroleum Storage Tank (PST) Permitting and Registration Information System (PARIS) database will go into production in 2013 and will require extensive training and procedural updates.
- Skills are needed to implement the three primary IT initiatives in the Information Strategic Plan:
  - Content Management System. Develop an agency-wide electronic-document management system for efficient internal and external retrieval.
  - Information Gateway. Improve the availability and retrieval of agency information on the Web through a single starting point.
  - Enterprise GIS. Build an agency enterprise GIS system with an external interface for customers to search for information spatially.

Budgetary constraints affect all aspects of work within the agency. Training resources are not sufficient to maintain an adaptive workforce in the quickly evolving information-technology environment.

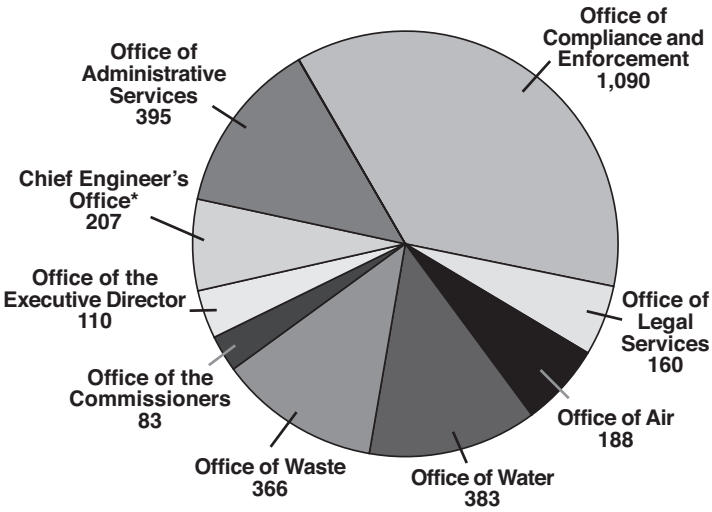
Another area of concern is travel funding, as it relates to specialized training, as well as the operational costs related to the gathering, managing, and reporting of data in the field.

Decreasing budgets have also resulted in fewer funds available for grant awards and existing contracts, which results in fewer staff to absorb the associated work, further taxing current staff resources. Finally, ensuring that agency salaries are competitive with other organizations using similar skill sets continues to be a challenge.

Current Workforce Profile (Supply Analysis)

In fiscal 2011, the TCEQ employed a cumulative total of 2,982 employees, which includes 302 separated employees. The following chart (Figure E.1) summarizes the agency workforce by office (the offices are now largely organized by media). The totals indicate an actual head count of employees, not full-time equivalents (FTEs), and do not include contractors or temporary personnel.

Figure E.1.
TCEQ Workforce by Office, FY 2011

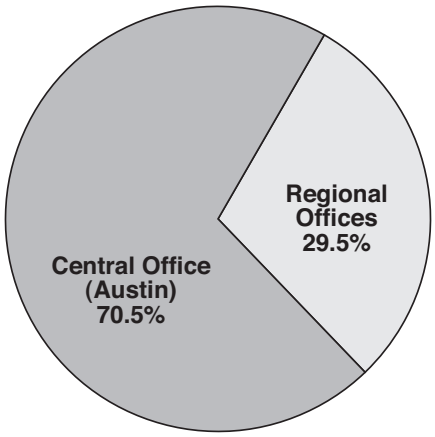


*See note re the CEO at the beginning of this appendix.
Note: Data includes separations.
Data Source: Human Resources Information System, as of 8/31/11.

Location of Employees

As of Aug. 31, 2011, 790 employees–or 29.5 percent of the total workforce–were located throughout the 16 regional offices (see Figure E.2). In an effort to facilitate delivery of the agency's services at the point of contact and to increase efficiencies, 113 (14.3%) of the regional employees were matrix-managed staff who worked in regional offices, but were supervised from Central Office.

Figure E.2.
Location of TCEQ Employees, FY 2011



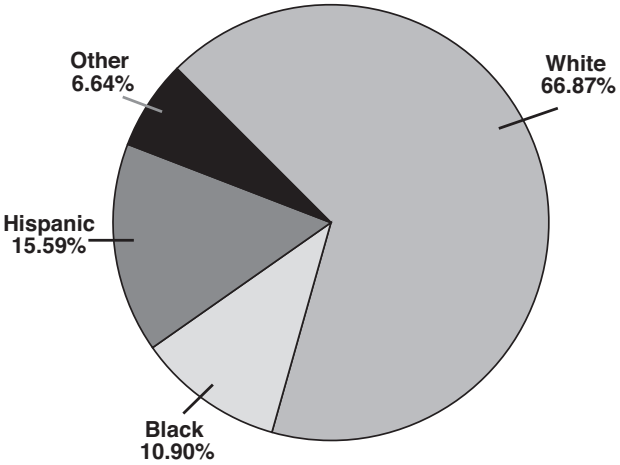
Data Source: Human Resources Information System, as of 8/31/11.

Workforce Demographics

Figures E.3 and E.4 illustrates the agency's workforce during fiscal 2011. Blacks and Hispanics constituted 26.5 percent of the agency's workforce, with other ethnic groups representing well over 6 percent. The available Texas labor force for Blacks is 11.28 percent; for Hispanics, it's 35.36 percent. This reveals an under-utilization of over 20 percent.

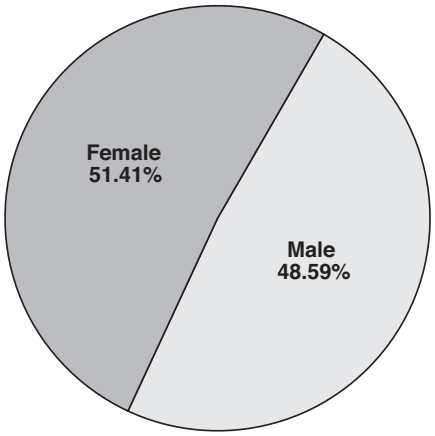
In fiscal 2011, the TCEQ workforce was 48.59 percent male and 51.41 percent female. These percentages indicate very little change from the last reporting period of fiscal 2009 (males, 48.41%; females, 51.59%). The available Texas labor force for males is 54.59 percent; for females, it's 45.41 percent. This is a 6 percent under- and over-utilization, respectively, in these categories.

Figure E.3.
Ethnicity of TCEQ Workforce, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

Figure E.4.
Gender of TCEQ Workforce, FY 2011



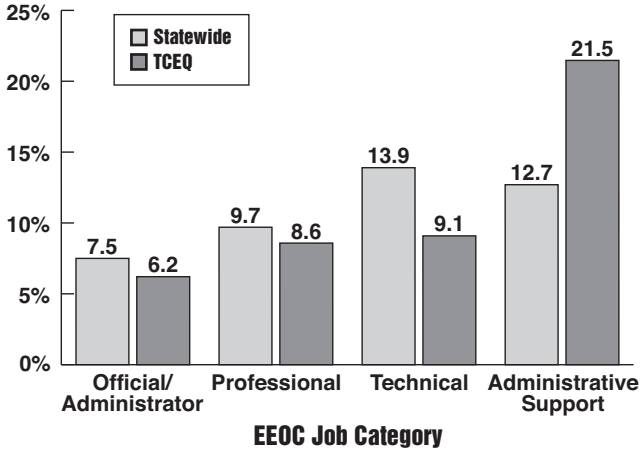
Data Source: Human Resources Information System, as of 8/31/11.

The TCEQ Workforce Compared to the Available Texas Civilian Labor Force

The TCEQ workforce comprises four employee job categories, as established by the Equal Employment Opportunity Commission (EEOC). These categories are: official/administrator, professional, technical, and administrative support.

Table E.2 and figures E.5, E.6, and E.7 compare the agency workforce as of Aug. 31, 2011, to the available statewide civilian labor force as reported in the *Equal Employment Opportunity and Minority Hiring Practices Report,* a publication of the Civil Rights Division of the Texas Workforce Commission (January 2011). This table reflects the percentages of Blacks, Hispanics, and females within the available statewide labor force (SLF) and the TCEQ workforce.

Figure E.5.
TCEQ Black Workforce Compared to Available Statewide Black Labor Force, FY 2011



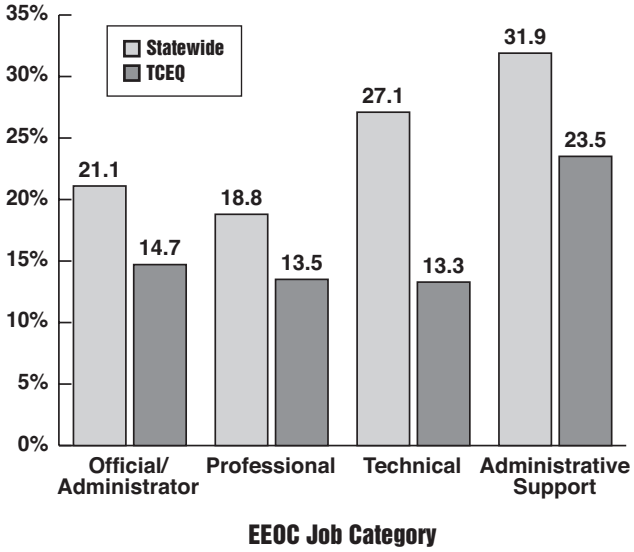
Data Source: Human Resources Information System, as of 8/31/11.

Table E.2. TCEQ Workforce Compared to Available Statewide Labor Force, 8/31/11

EEOC Job Category	Black		Hispanic		Female	
	SLF	TCEQ	SLF	TCEQ	SLF	TCEQ
Official/Administrator	7.5%	6.21%	21.1%	14.71%	37.5%	42.16%
Professional	9.7%	8.58%	18.8%	13.51%	53.3%	44.09%
Technical	13.9%	9.09%	27.1%	13.29%	53.9%	37.06%
Administrative support	12.7%	21.47%	31.9%	23.51%	67.1%	83.99%

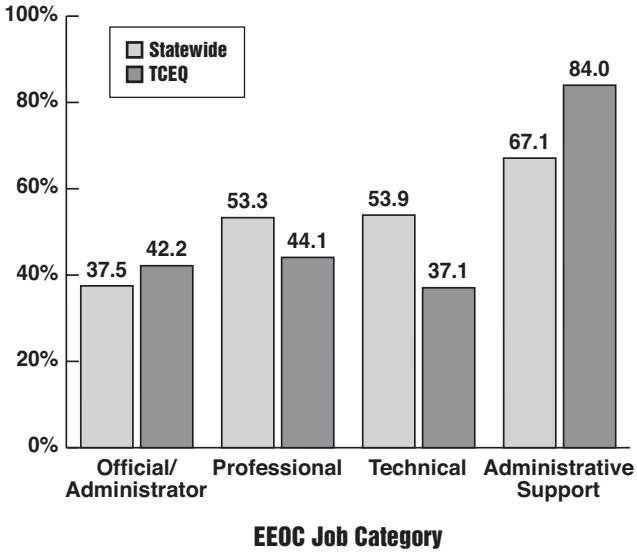
Data Source: Human Resources Information System, as of 8/31/11.

Figure E.6.
TCEQ Hispanic Workforce Compared to Available Statewide Hispanic Labor Force, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

Figure E.7.
TCEQ Female Workforce Compared to Available Statewide Female Labor Force, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

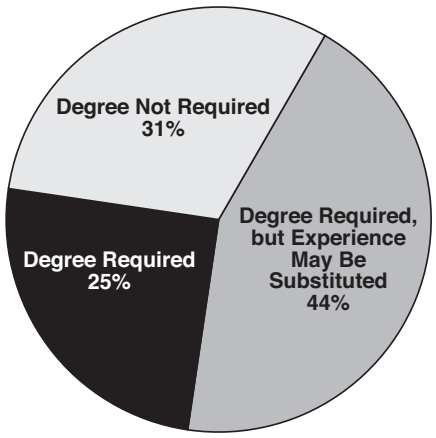
Although minorities and females are generally well represented at the TCEQ, the agency's ability to mirror the available statewide labor force remains difficult. During fiscal years 2010 and 2011, the agency slowed hiring to avoid a reduction in force.

Workforce Qualifications

The TCEQ employs a highly qualified workforce in a variety of program areas, performing complex and diverse duties. Strong employee competencies are critical to meet program objectives and goals.

Over 25 percent of the TCEQ's job classifications require a bachelor's degree (see Figure E.8.). Another 44 percent require a degree; however, related experience may substitute for this requirement. The remaining positions not requiring a degree constitute over 31 percent of the agency's workforce.

Figure E.8.
Education Requirements of TCEQ Employees, FY 2011

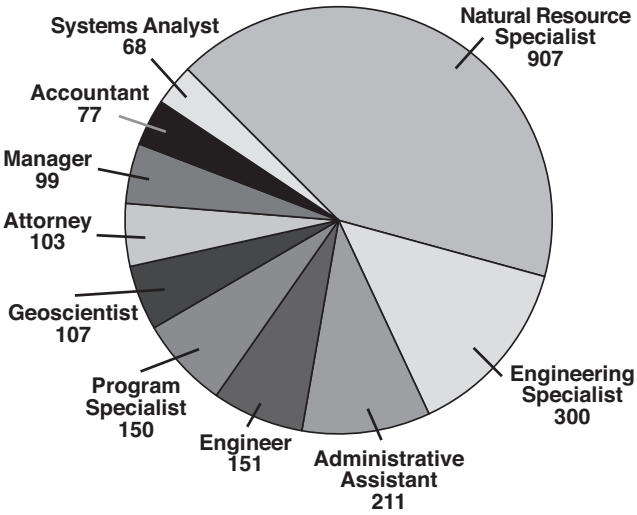


Data Source: Human Resources Information System, as of 8/31/11.

Workforce Profile by Job Classification

Although over 75 percent of the agency's employees are categorized as Officials/Administrators and Professionals, the work fulfilled by TCEQ employees is diverse, requiring the use of over 300 job classifications and sub-specifications. Figure E.9 represents the ten most frequently used job classification series in fiscal 2011.

Figure E.9.
Population at the TCEQ by Job Classification Series, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

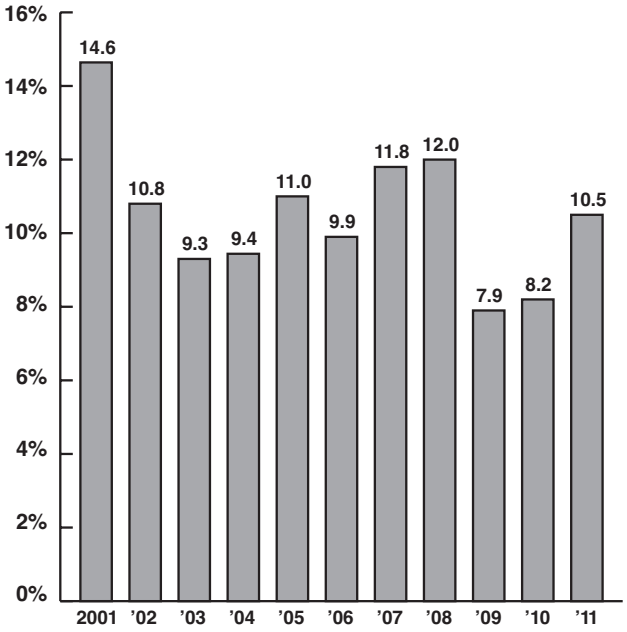
By the end of the fourth quarter of fiscal 2011, the TCEQ supplemented its workforce with 100 contracted staff to provide vital program support, manage workloads, and perform various information technology functions as a means of meeting agency goals and objectives.

Employee Turnover

Although the agency's turnover has fluctuated over the past 10 years (see Figure E.10), it consistently remains below statewide turnover. For example, in fiscal 2011, the statewide turnover rate was 16.8 percent in comparison to the TCEQ's turnover rate of 10.5 percent. While this rate is higher than the fiscal 2010 turnover rate of 8.2 percent, the agency continues to enjoy a lower turnover than the reported statewide turnover. This can be attributed to the agency's retention efforts, as well as to the current economic climate.

While the TCEQ has been very fortunate to retain a highly qualified workforce, possible changes to the state's retirement and benefits plan, as well as a recovering economy, may affect future retirement decisions, as well as our ability to recruit.

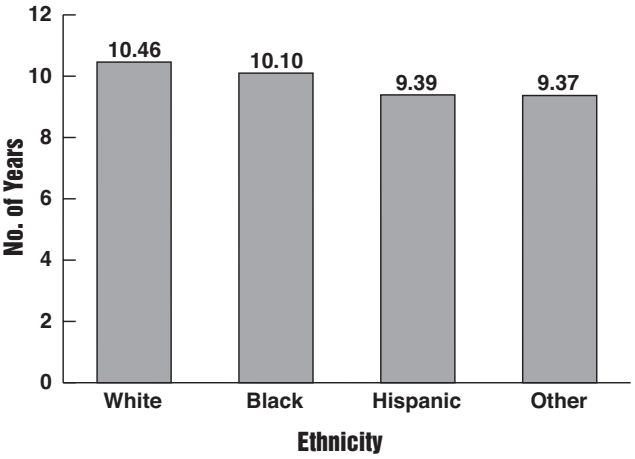
Figure E.10.
TCEQ Employee Turnover Rate, FYs 2001–2011



Data Source: Human Resources Information System, as of 8/31/11.

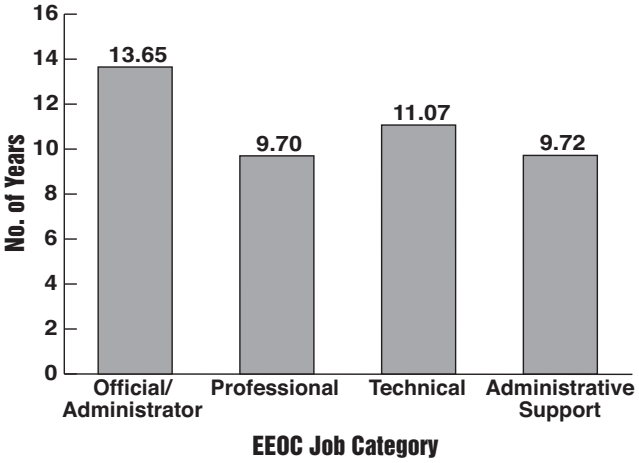
See Figures E.11 and E.12 for additional information about the tenure of the TCEQ workforce, which remains relatively stable.

Figure E.11.
TCEQ Employee Tenure by Race, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

Figure E.12.
TCEQ Employee Tenure by EEOC Job Category, FY 2011



Data Source: Human Resources Information System, as of 8/31/11.

Future Workforce Profile (Demand Analysis)

The TCEQ carries out its mission through broad and diverse activities. These activities require that employees demonstrate a high level of proficiency in a variety of critical skills. Table E.3 is a listing of sets of critical "skill clusters" that have been identified as the skill sets necessary to accomplish the agency's mission.

Table E.3. Critical Workforce Skill Clusters within the TCEQ Offices

Problem Solving
Analysis
Critical thinking
Decision making
Innovation
Information Management
Database development, management, and integration
Software proficiency
Web development and maintenance
Computer-assisted tools
Graphic design
Electronic reporting
Technical Knowledge *(may be unique to a certain program area)*
Agency policies, procedures, and programs
Local, state, and federal laws, rules, and regulations
Specialized technical knowledge
Policy analysis and development
Statistical analysis
Regulation analysis and development
Technical analysis
Research
Litigation
Auditing
Inventory management
Project Management
Organizing
Planning
Managing multiple priorities
Quality analysis and process improvement
Coordination
Communication
Written – composition and editing
Verbal – public speaking and presentation
Interpersonal sensitivity
Translating technical information into layperson's terms
Teamwork
Marketing and public relations
Customer service
Management/Leadership
Interpersonal skills
Performance management
Strategic planning
Conducting training
Mentoring
Meeting planning/facilitation
Contract management
Grant management
Financial management
Delegation
Administrative/Support
Word processing
Tracking and record keeping
Mail processing

The agency continues to emphasize and support workforce and succession planning. This process involves building a viable talent pool that contributes

to the current and future success of the agency, including the need for experienced employees to mentor and impart knowledge to their potential successors. Such initiatives will enable the agency to identify the skills, knowledge, and abilities needed to maintain our organizational excellence and to strengthen the skills of up-and-coming staff.

The agency strives to compete in the marketplace for certain disciplines, such as science and engineering. The predominant occupations used at the TCEQ–such as, for example, environmental engineer, scientist, and geoscientist–require STEM (science, technology, engineering, and math) degrees; however, the number of degrees to be awarded in these fields is expected to fall short. These occupations are projected to have a faster-than-average job growth, as identified by the U.S. Bureau of Labor Statistics, at a rate of 29 percent. The same can be said for environmental attorneys. According to the Bureau of Labor Statistics, the demand for workers in this profession is expected to grow about as fast as the average employment growth (13%) and competition will be keen.

The ability to recruit people with information-technology skills will also be essential. Network and computer-systems analysts are projected to have the fastest job growth, at 53 percent, with network administrator, software engineer, and database administrator maintaining a high profile as fast-growing occupations in Texas and elsewhere.

Gap Analysis

Each office within the TCEQ analyzed the anticipated need for each skill set and the possible risk associated with the skill being unavailable over the next five years. Skills that are "at risk"' are indicated in Table E.4, prioritized by "low," "medium," or "high," reserving the "high" designation for those gaps that will require action to address them.

Table E.4. Critical Skills Checklist and Gap Analysis

LEGEND		
CO – Office of the Commissioners ED – Office of the Executive Director CEO – Chief Engineer's Office*	OAS – Office of Administrative Services OCE – Office of Compliance & Enforcement OLS – Office of Legal Services	OA – Office of Air OW – Office of Water OOW – Office of Waste

*See note re the CEO at the beginning of this appendix.

Skill Category	Skill	CO	ED	CEO	OAS	OA	OLS	OOW	OCE	OW
Problem Solving	Analysis			Med	**High**					
	Critical thinking				**High**	Med				
	Decision making					Med				
	Innovation				Med	Med				Med
Information Management	Database development, management, and integration	Med				High				Med
	Software proficiency	Med		Med	Med	Med				High
	Web development and maintenance	Low				Med			High	Med
	Computer assisted tools	Med		Med	Med	Med			Med	Low
	Graphic design									
	Electronic reporting	Low		Med		High			**High**	Low

continued on next page

Table E.4. Critical Skills Checklist and Gap Analysis (continued)

Skill Category	Skill	CO	ED	CEO	OAS	OA	OLS	OOW	OCE	OW
Technical Knowledge (may be unique to certain program areas)	Agency policies, procedures, and programs			High					High	
	Local, state, and federal laws, rules, and regulations			Med	Med	Med			High	
	Specialized technical knowledge	Med		High	High	High		**High**	**High**	**High**
	Policy analysis and development	Med		High					High	
	Statistical analysis	Med		High						Med
	Regulation analysis and development			High		Med			High	
	Technical analysis	Med		Med		Med			High	
	Research									
	Litigation									
	Auditing							Med		Med
	Inventory management									Low
	Other: GIS, GeoDatabase									Med
	Other: Strategic-plan development				Med					
	Other: Fiscal note process				Low					
	Other: Performance measure analysis and development				Med					
Project Management	Organizing				High					
	Planning				High					
	Managing multiple priorities				**High**	Med				
	Quality analysis and process improvement				High	High				
	Coordination				High					
	Other: Business analysis				High					

continued on next page

Table E.4. Critical Skills Checklist and Gap Analysis (continued)

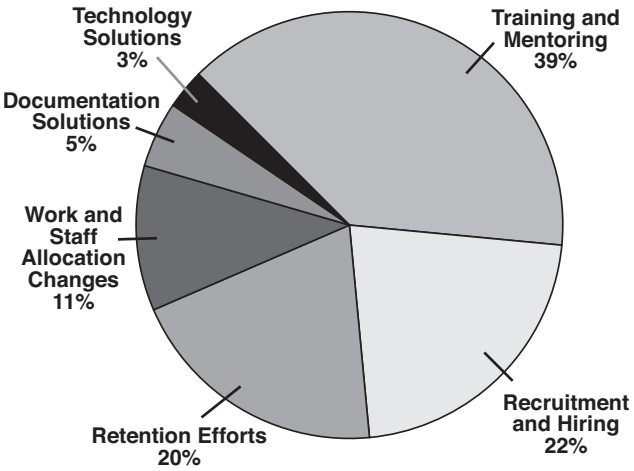
Skill Category	Skill	CO	ED	CEO	OAS	OA	OLS	OOW	OCE	OW
Communication	Written–composition and editing				**High**	Med			Med	
	Verbal–public speaking and presentation	Med							Med	
	Interpersonal sensitivity									
	Translating technical information into layperson's terms				High					
	Teamwork									
	Marketing/public relations			Med						
	Customer service									
	Other: Public participation			Med						
	Other: Publications			Med						
	Other: Business process documentation and knowledge transfer					Med				
	Other: Spanish-speaking staff for hearing questions and other customer-service issues									Med
Management/ Leadership	Interpersonal skills									
	Performance management			Med						
	Strategic planning									
	Conducting training	Med							Med	
	Mentoring			Med		Med			High	
	Meeting planning/ facilitation	Med								
	Contract management	Med		Med	Med					**High**
	Grant management			Med				**High**	**High**	Med
	Financial management			Med						
	Delegation	Med								
	Other: Bankruptcy management						High			
Administrative Support	Word processing									
	Tracking/record keeping									
	Mail processing									
Other Skills	Other: Database design and programming	Med								

Strategy Development

The TCEQ anticipates implementing key strategies, which are discussed in the following sections, to address expected skill gaps. Figure E.13 displays the strategies that were identified by agency offices.

As in past assessments, Training/Mentoring will be the primary focus to ensure that the TCEQ aligns appropriate personnel with the necessary skill sets to fulfill the agency's core functions. The use of strategies as indicated below reflects awareness among hiring supervisors that there is a critical need to continue developing current staff skills while also hiring a future workforce with the critical skills needed.

Figure E.13.
TCEQ Strategies to Address Skill Gaps



Data Source: TCEQ Office Workforce Plan, March 2012.

Some of the specific strategies mentioned by agency offices are:

- Develop viable options to recruit, obtain access to, contract with, or train staff in critical-needs areas.
- Reallocate positions as the needs occur.
- Recruit licensed and degreed candidates for certain vacancies and establish career ladders as appropriate.
- Continue refinements of standards and documentation of processes and procedures for core functions; develop guidance documents.
- Utilize internship programs.

Training and Mentoring

It is evident that job shadowing, on-the-job training, and cross-training will continue to be the primary focus in the development and enhancement of critical workforce skills. This will allow less-tenured staff to work with senior subject-matter experts, with the goal of developing and sharpening specific skills. Staff should also be afforded the opportunity to attend training that promotes personal and professional development.

The TCEQ will continue developing future leaders with the continuance of the Aspiring Leaders Program. This program provides developmental and promotional opportunities for in-house talent to rise in management positions that support the agency's long-term objective for a team with a strong institutional-knowledge base.

Reductions in travel funds could affect efforts to ensure that staff remains knowledgeable of scientific and technological changes, by limiting the ability to attend specialized technical training or to participate in national technical organizations and initiatives. As agency resources are being limited, the Human Resources and Staff Services Division is asked to enhance technical and leadership training, while maximizing training dollars. As a means to accommodate budget constraints, the agency is turning to developing in-house classes and online training.

Recruitment and Hiring

While the agency has limitations on FTE levels, offices may address these restrictions by realignment, the elimination of unnecessary programs, and streamlining business processes to maintain a consistent level of regulatory oversight and customer service. Offices will pursue hiring above the entry level for jobs that are hard to fill due to the competitive market base. In addition, the continuance of internship programs has proven to be a successful

avenue for hiring employees that have an interest and experience in environmental work.

The TCEQ has a commitment to employing a qualified and diverse workforce. The recruitment program maintains a strong diversity focus. Recruitment events are regularly planned to target qualified ethnic minority and female candidates. The increased recruitment efforts necessitate a continued presence at events, while operating within limited agency resources.

The TCEQ will continue to analyze hiring practices and determine opportunities for enhanced workforce diversity through usage of the Express Hire Program at diversity-focused events and predominantly minority colleges and universities. This program allows hiring supervisors to identify and hire qualified applicants for job vacancies on the spot at recruiting events. A final review of the applicant's qualifications, along with other hiring requirements, is conducted later.

Retention Efforts

Retention of qualified staff is essential. Offices plan to retain individuals who possess essential skills by providing opportunities for increased responsibility (promotions) and salary enhancements to reward exceptional performance. The TCEQ will also continue to provide developmental opportunities for employees to focus on critical skills, competencies, and technical requirements needed by the agency. It is vital to develop employees to offset potential losses in staff with technical expertise, institutional knowledge, and management experience.

Other retention strategies will include the continued use of recognition and administrative-leave awards, flextime or other alternative work-hour schedules, and telecommuting options, to support a more flexible and mobile workforce.

Work and Staff Allocation Changes

Managers continue to review workforce needs and available skill sets to ensure that adequate staff are assigned to meet the business needs of the agency. Offices indicate that the strategies most utilized in this area will be to assign backups to every position, include these backup responsibilities in their performance plan, and involve entry- and journey-level positions in senior decision making. Managers pursue process redesign as a means to improve efficiencies and reduce the risk associated with a potential loss of specialized skill sets.

Documentation and Technology Solutions

Managers understand the need for documenting processes and procedures to ensure that tools are available for training purposes and continuity of operations. Technological solutions will continue to allow the agency to reallocate its human resources.

A P P E N D I X F

TCEQ Survey of Employee Engagement, 2011

The Survey of Employee Engagement (SEE), formerly known as the Survey of Organizational Excellence, or SOE, gauges employee perceptions about working for the TCEQ. The survey framework assesses workplace dimensions capturing the total work environment. Each workplace dimension consists of survey constructs. The survey constructs are designed to profile organizational comparison with areas of strength and concern so that interventions can be targeted appropriately.

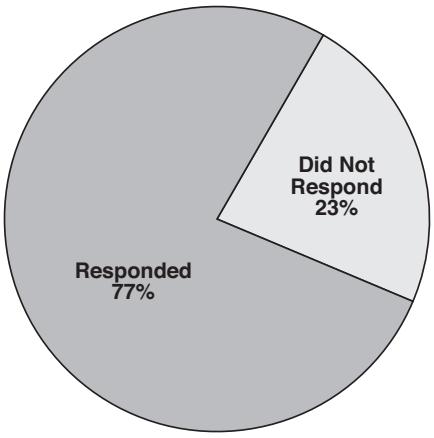
Agency Participation

Overall Response Rate

Out of the 2,660 employees who were invited to take the survey, 2,058 responded. As a general rule, rates higher than 50 percent suggest soundness. Rates lower than 30 percent may indicate problems.

At 77 percent, our response rate is considered high. High rates mean that employees have an investment in the organization, want to see the organization improve, and generally have a sense of responsibility to the organization. With this level of engagement, employees have high expectations for leadership to act on the survey results.

Figure F.1.
Survey Response Rate, 2011

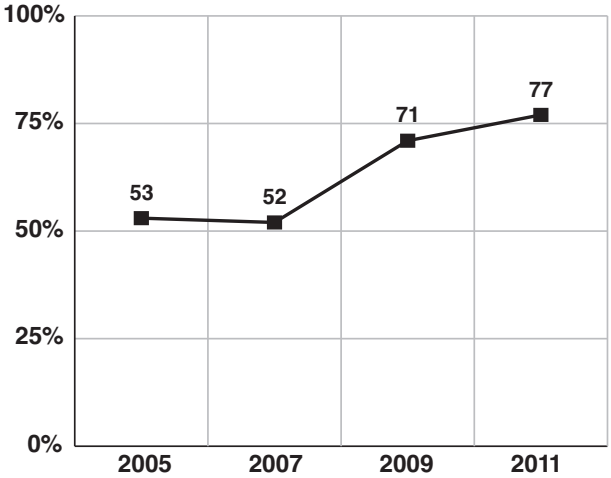


Data Source: Institute for Organizational Excellence, UT Austin.

Response Rate Over Time

One of the values of participating in multiple iterations of the survey is the opportunity to measure organizational change over time. In general, response rates should rise from the first to the second and succeeding iterations. If organizational health is sound and the online administration option is used, rates tend to plateau around the 60 to 65 percent level. A sharp decline in your response rate over time can be a significant indicator of a current or potential developing organizational problem.

Figure F.2.
Survey Response Rate, 2006–2012



Data Source: Institute for Organizational Excellence, UT Austin.

Areas of Strength

The survey identifies three constructs that are relative strengths for the organization.

Physical Environment

The Physical Environment construct captures employees' perceptions of the total work atmosphere and the degree to which employees believe that it is a "safe" working environment. This construct addresses the "feel" of the workplace as perceived by the employee.

High scores here indicate that employees view their work setting positively. It means that the setting is seen as satisfactory and safe, and that adequate tools and resources are available.

Employee Development

The Employee Development construct is an assessment of the priority given to employees' personal- and job-growth needs. It provides insight into whether the culture of the organization sees human resources as the most important resource or as one of many resources. It directly addresses the degree to which the organization is seeking to maximize gains from investment in employees.

High scores here indicate that employees feel the organization provides opportunities for growth in organizational responsibilities and personal needs. Maintaining high scores requires providing both resources and challenges for employees.

Strategic

The Strategic construct reflects employees' thinking about how the organization responds to external influences that should play a role in defining the organization's mission, vision, services, and products. Implied in this construct is the ability of the organization to seek out and work with relevant external entities.

High scores here indicate that employees view the organization as able to quickly relate its mission and goals to environmental changes and demands. It is viewed as creating programs that advance the organization and as having highly capable means of drawing information and meaning from the environment. Maintaining these high scores will require leadership to continually assess the ability of the organization and employees at all levels to test programs against need and to continue to have rapid feedback from the environment.

Areas of Concern

The survey identifies three other constructs that are relative concerns for the organization.

Pay

The Pay construct addresses perceptions of the overall compensation package offered by the organization. It describes how well the compensation package "holds up" when employees compare it to that of similar jobs in other organizations.

Low scores here suggest that pay is a central concern or reason for satisfaction or discontent. In some situations, pay does not meet comparables in similar organizations. In other cases, individuals may feel that pay levels are not appropriately set to work demands, experience, and ability. Cost-of-living increases may cause sharp drops in purchasing power and, as a result, employees may view pay levels as unfair. Remedying Pay problems requires a determination of which of the above factors are responsible.

We can address the low scores in Pay by reviewing comparable positions in other organizations. cost-of-living information, and the employee feedback sessions.

Internal Communication

The Internal Communication construct captures the organization's communications flow top-down, bottom-up, and across divisions or departments. It addresses the extent to which communication exchanges are open and candid, and move the organization toward its goals.

Average scores here suggest that employees feel that information does not arrive in a timely fashion and that often needed facts are difficult to find. In general, problems with Internal Communication stem from the following factors:

- An organization that has outgrown an older, verbal culture that's based on a few people knowing "how to work the system."
- Lack of investment and training in modern communication technology.
- Perhaps, vested interests that seek to control needed information.

We can address the low scores in Internal Communication by reviewing existing policy and procedural

manuals to determine their availability, assessing how well telephone systems are articulated and whether e-mail, faxing, and Internet modalities are developed and in full use.

Diversity

The Diversity construct addresses the extent to which employees feel that personal differences–such as in ethnicity, social class, or lifestyle–may result in alienation from the larger organization and missed opportunities for learning or advancement. It examines how the organization understands and uses creativity coming from individual differences to improve organizational effectiveness.

Average scores here suggest that while there may be no feeling of unfair discrimination toward any particular group, there may be a "sameness," a cultural homogeneity that may not be in the organization's best interest.

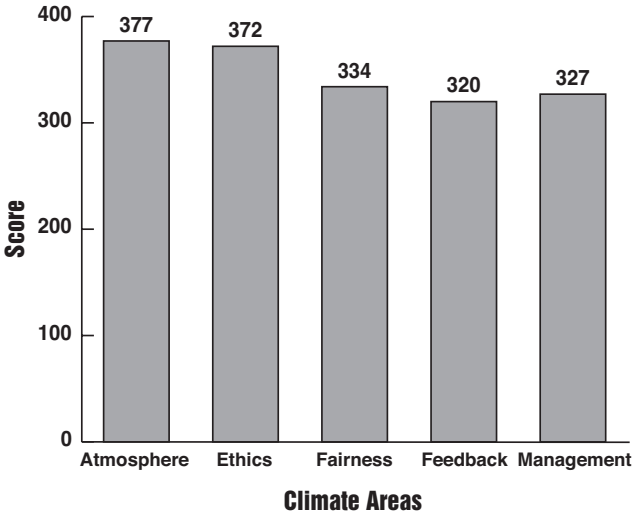
We can address the low scores by reviewing the organization's demographic numbers as well as how representative various groups are within the hierarchy of the organization. We can also consider recruitment procedures and training programs for persons that are underrepresented, to improve the size of candidacy pools for hiring and promotion; community outreach, including recruitment programs with high schools and colleges; and programs to encourage the development of opportunities for underrepresented groups.

Climate Analysis

The climate in which employees work determines, to a large extent, the efficiency and effectiveness of an organization. The appropriate climate is a safe, non-harassing environment with ethical employees who treat each other with fairness and respect. Moreover, it's an organization with proactive management that communicates and has the capability to make thoughtful decisions. "Climate areas" have been color-coded to highlight the organization's areas of strength and its areas of concern. The two highest-scoring climate areas are in blue(Atmosphere, Ethics), the two lowest-scoring climate areas are in red (Feedback, Management), and the remaining climate area is in yellow (Fairness).

Each climate area is displayed below with its corresponding score. Scores above 350 suggest that employees perceive the issue more positively than negatively, and scores of 375 or higher indicate areas of substantial strength. Conversely, scores below 350 are viewed less positively by employees, and scores below 325 should be a significant source of concern for the organization and should receive immediate attention.

Figure F.3.
2011 Survey: Climate Analysis



Data Source: Institute for Organizational Excellence, UT Austin.

Climate Definitions

Atmosphere An organization must be free of harassment in order to establish a community of reciprocity.

Ethics An ethical climate is a foundation for building trust within an organization, where not only are employees ethical in their behavior, but violations of ethics are appropriately handled.

Fairness Fairness measures the extent to which employees believe that equal and fair opportunity exists for all members of the organization.

Feedback Feedback is an essential element of organizational learning by providing the necessary data in which improvement can occur.

Management Management that is accessible, visible, and an effective communicator of information is a basic tenet of successful leadership.

Next Steps: Interpretation and Intervention

Agency management is currently conducting a review of the Survey of Employee Engagement survey results with a focus on elements that did not score as well as others. The executive director and deputy executive director are working with the deputies to determine the most appropriate and effective manner to bring staff from throughout the agency together to develop recommendations and actions to address these areas.