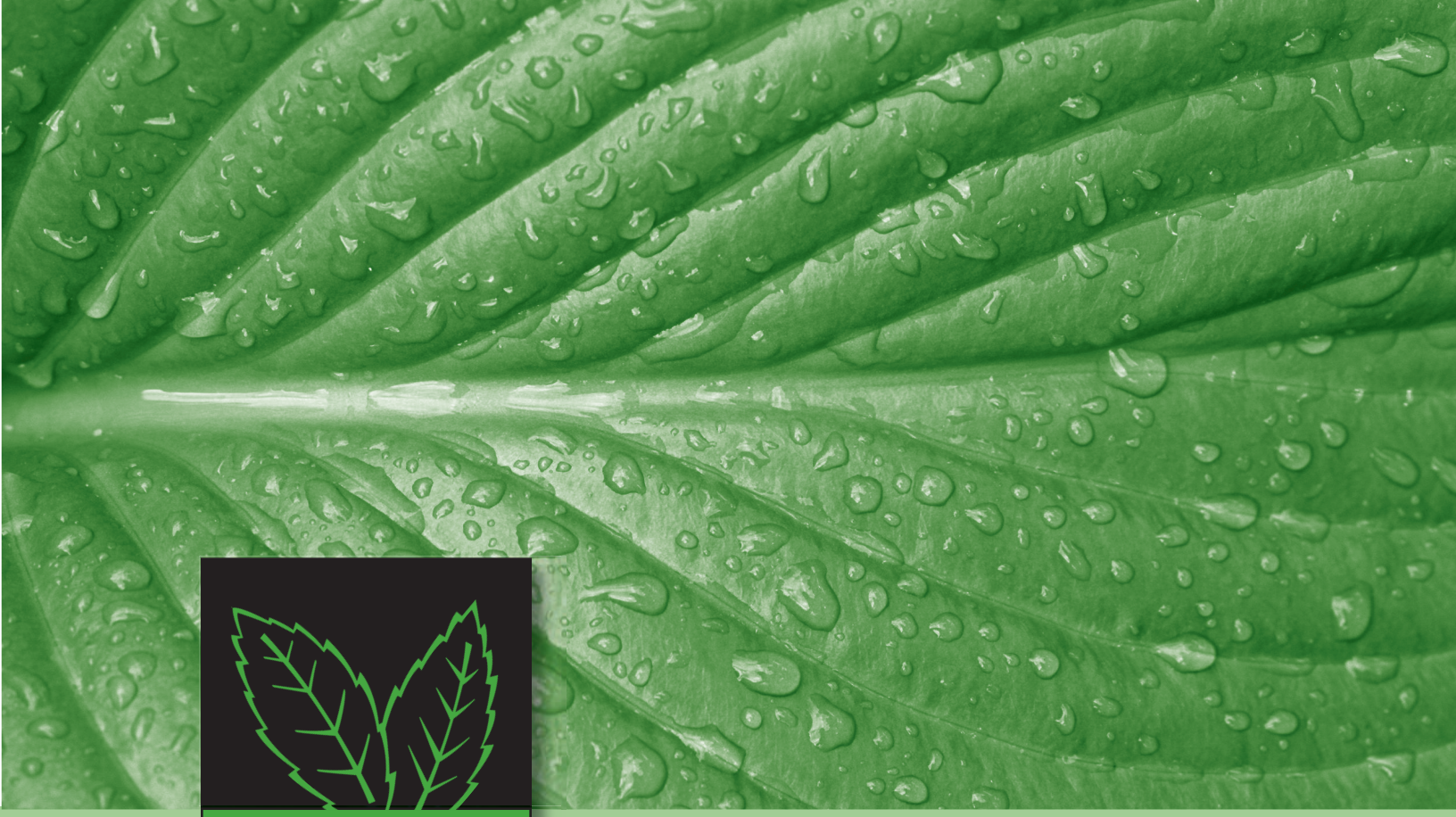

Strategic Plan

FISCAL YEARS 2009–2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SFR-035/09

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Strategic Plan

FISCAL YEARS 2009–2013

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

July 2008

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Statewide Vision and Mission

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

- Assuring open access to an educational system that not only guarantees the basic core knowledge necessary for productive citizens but also emphasizes excellence and accountability in all academic and intellectual undertakings.
- Creating and retaining job opportunities and building a stronger economy to secure Texas' global competitiveness, leading our people to more prosperity, and a stable source of funding for core priorities.
- Protecting and preserving the health, safety, and well-being of our citizens by ensuring that health care is accessible and affordable, and by safeguarding our neighborhoods and communities from those who intend us harm.
- Providing disciplined, principled government that invests public funds wisely and efficiently.

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. And 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 mineral resources–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

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

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/affirmative action 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/Internal Assessment

Chapter 1. Historical and Organizational Overview
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Main Functions | Agency Workforce | Organizational Structure

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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	Chapter Title	Brief Description
Texas Water Code, Chapter 5	Texas Natural Resource Conservation Commission	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.
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 authorizes the imposition of administrative, civil, and criminal penalties.
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 use of surface water administered by the commission, and requires adjudication of claims by state courts.
Texas Water Code, Chapter 12	Provisions Generally Applicable to Water Rights, Dam Safety, and Water Districts	This chapter directs the manner in which dams and water rights applications will be processed, and defines the agency's general supervision over dams, water districts and authorities.
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.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation	Chapter Title	Brief Description
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 that the commission ensure that the quality of water in the state is maintained consistent with the public health and enjoyment, the protection of terrestrial and aquatic life, the operation of existing industries, and the economic development of the state; and authorizes the commission to establish permitting, management, and monitoring programs to support this protection.
Texas Water Code, Chapter 27	Injection Wells	This chapter is designed to maintain the quality of fresh water in the state and establishes a permitting system for injection well activity, unless the activity is authorized by 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 32	Subsurface Area Drip Dispersal Systems	This chapter establishes permitting requirements for subsurface area drip dispersal systems.
Texas Occupations Code, Chapter 1903	Landscape Irrigators	This chapter requires the commission to license landscape irrigators and adopt rules for a licensing program for landscape irrigators.
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 Section 59, Article XVI, Texas Constitution. The chapter recognizes groundwater conservation districts as the state's preferred method of groundwater management.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation	Chapter Title	Brief Description
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 §§ 26.0301, 26.3573, 26.452, and 26.456, Texas Health and Safety Code §§ 341.033, 341.034, 361.027 and 366.071, and Texas Occupations Code § 1903.251.
Texas Water Code, Chapters 41–44, 46, and 47	River Compacts	This chapter provides a means for Texas and bordering states to enter into interstate agreements governing boundary and shared-use waters (Rio Grande, Pecos River, Red River, Caddo Lake, Canadian River, 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 either Section 52, Article III, or Section 59, Article XVI of the Texas Constitution (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, Chapters 51–66; Local Government Code, Chapter 375	The title of each chapter is the particular type of district that it applies to–for example, Municipal Utility Districts	Each chapter provides provisions that apply to each specific type of district.
Texas Health and Safety Code, Chapter 341, Subchapter C	Sanitary Standards of Drinking Water; Protection of Public Water Supplies and Bodies of Water	This chapter is established to preserve the public health, safety, and welfare by requiring the commission to ensure that public drinking water supply systems supply safe drinking water in adequate quantities, are financially stable, and are technically sound. The chapter 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.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation	Chapter Title	Brief Description
Texas Health and Safety Code, Chapter 361	Solid Waste Disposal Act	This chapter is established 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, including hazardous waste, and establishes a permitting system to administer this responsibility. The chapter includes provisions authorizing the investigation and remediation of sites contaminated by hazardous substances.
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 from these systems. The commission is required to license or register persons who install and maintain OSSFs.
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 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 emitting pollutants from operations and an alternative fuels program applicable to certain vehicles.
Texas Health and Safety Code, Chapter 384	Area Emission Reduction Credit Organizations (AERCO)	This program 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 the initial establishment, withdraw approval, dissolve or renew, and to audit an AERCO.

continued on next page

Table 1. Statutory Citations for TCEQ Authority (continued)

Statutory Citation	Chapter Title	Brief Description
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 Diesel Emissions Reductions Incentive Program by awarding grants for the installation of emission control equipment.
Texas Health and Safety Code, Chapter 387	New Technology Research and Development Program (NTRD)	This chapter provides for grants to fund the development of new emission reduction techniques, especially those that could eventually be commercially funded through the TERP program. The TCEQ became responsible for this program in 2003.
Texas Health and Safety Code, Chapter 390	Clean School Bus Program	This chapter establishes a grant program administered by the TCEQ, which is designed to reduce the exposure of school children to diesel exhaust in and around school buses.
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 is responsible for the regulation of byproduct material and the disposal of radioactive materials except oil and gas NORM waste.
Texas Tax Code, Sections 11.31 and 26.045	Tax Exemption for Pollution Control Properties	These provisions authorize the TCEQ to evaluate requests for use determinations for pollution control properties.

Historical Perspective

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

Major Events in TCEQ History

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

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

The major events in TCEQ history 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 (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 ■ **Congress passes the Federal Water Pollution Control Act.**
■ Texas' first air quality initiative is established when the State Department of Health begins air sampling in the state.

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

1961 ■ The Texas Pollution Control Act establishes the Texas Water Pollution Board, and eliminates the Water Pollution Advisory Council, creating the state's first true pollution control agency.
■ A water well drillers advisory group is established.
■ The Injection Well Act is passed, authorizing the Texas Board of Water Engineers to regulate waste disposal (other than that from the oil and gas industry) into the subsurface through injection wells.

1962 ■ The Texas Board of Water Engineers becomes the Texas Water Commission, with additional responsibilities for water conservation and pollution control.
■ The Texas Water Pollution Board adopts its first rules and regulations.

1963 ■ **Congress enacts the Federal 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. TWQB adopts its first rules.
■ The Texas Air Control Board adopts first air quality regulations.

1969 ■ Texas takes over most federal air monitoring responsibilities.
■ The Texas Solid Waste Disposal Act authorizes the Texas Water Quality Board to regulate industrial solid waste, and the Texas Department of Health to regulate municipal solid waste.
■ **A presidential order creates the Federal Environmental Protection Agency (EPA).**

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

1971 ■ **The EPA adopts National Ambient Air Quality Standards.**
■ The Legislature first authorizes municipal utility districts.
■ The Texas Air Control Board establishes air permits program.

1972 ■ **Congress passes the Federal Clean Water Act.**
■ The Texas Air Control Board submits the first State Implementation Plan to the EPA. It also deploys the first continuous air monitoring station.

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

1974 ■ Texas et al. vs. the U.S. Environmental Protection Agency challenges the EPA's plan for controlling ozone in Texas.
■ The Texas Air Control Board completes deployment of first continuous monitoring network.
■ **Congress enacts the Safe Drinking Water Act.**

1976 ■ **Congress passes the Federal 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 in an effort to consolidate the state's water programs. 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, or 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 State Implementation Plan to the EPA.

1980 ■ **Congress enacts the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), better known as Superfund, to provide funding for the cleanup of contaminated sites.**
■ The Texas Air Control Board submits plan to address lead pollution to the EPA.

1982 ■ Texas receives Underground Injection Control (UIC) authorization.

1984 ■ **Congress passes the Federal Hazardous and Solid Waste Amendments (HSWA) to the RCRA.**
■ Texas receives final Resource Conservation and Recovery Act (RCRA) authorization.

1985 ■ The Legislature dissolves the Department of Water Resources and transfers regulatory enforcement to the recreated Texas Water Commission, and planning and finance responsibilities to the recreated Water Development Board.
■ The Legislature moves the Water Rates and Utilities Services Program from the Public Utility Commission of Texas to the newly created Texas Water Commission.
■ The Texas Air Control Board mobile sampling laboratory is first deployed.

1986 ■ **Congress passes the Federal Superfund Amendments and Reauthorization Act (SARA), reauthorizes CERCLA, and creates the Toxics Release Inventory (TRI).**

- **Congress amends the Federal Safe Drinking Water Act.**

1987
- **Congress passes the Federal Water Quality Act of 1987.**
- Texas establishes an EPA-approved state wellhead protection program.

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

1991
- **Federal Clean Air Act Amendments of 1990 are implemented,** and expansion of Texas Air Control Board staffing begins in support of the act.
- The Legislature, in special session, creates the Texas Natural Resource Conservation Commission to be effective Sept. 1, 1993. Preparation begins for the consolidation of the Texas Water Commission and the Texas Air Control Board into the TNRCC.

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

1993
- The Texas Natural Resource Conservation Commission begins operation, bringing together for the first time regulatory programs for air, water, and waste.

1997
- The Legislature transfers water well drillers regulation from the TNRCC to the Texas Department of Licensing and Regulation.
- The Legislature returns uranium mining, processing, and by-product disposal oversight functions 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. Aim of agreement is to allocate resources most appropriately throughout Texas on a regional basis.
- The Legislature adopts Senate Bill 1, mandating water conservation planning for large water users and requiring development of drought contingency plans by public water suppliers.

1998
- Texas receives National Pollutant Discharge Elimination System (NPDES) authorization.

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

2001
- The agency is continued for 12 years under House Bill 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 (TNRCC) to the Texas Commission on Environmental Quality (TCEQ).

2003
- TERP is fully funded by the Texas Legislature through the passage of House Bill 1365.
- The Texas Legislature passes House Bill 1366 and establishes a dry cleaning regulation and remediation program at the agency.
- The Texas Legislature, in the third called session, passes House Bill 37, which transfers the technology research and development

program from the Texas Council on Environmental Technology (TCET) to the TCEQ.

- Through House Bill 1567, the Legislature provides for the licensing of a low-level radioactive waste (LLRW) disposal facility, and establishes procedures for the agency to accept and assess license applications from private entities to dispose of LLRW.
- 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 (EMRS), 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.
- The agency begins an in-depth examination of its enforcement processes and functions.

2005
- The TCEQ undertakes comprehensive review and overhaul of the state's municipal solid waste regulations.
- TCEQ staff are directed by the commissioners to begin a comprehensive review, including extensive public involvement, of the entire enforcement process of the agency.

2006
- As of February 2006, the TCEQ has reviewed an extensive public record of comment and adopted a number of significant revisions to the agency's enforcement process, including a pilot field citation program to begin March 13, 2006.
- On March 1, 2006, the TCEQ adopts a major revision, streamlining, and improvement in state municipal solid waste regulations.

2007
- The Texas Legislature passes Senate Bill 1604, which transfers radioactive waste programs from the Department of State Health Services to the TCEQ.
- Senate Bill 1436 transfers the responsibility for the National Floodplain Insurance Program (NFIP) from the TCEQ to the Texas Water Development Board (TWDB).
- With the passage of Senate Bill 12, the Legislature increases the scope of the Texas Emissions Reduction Plan (TERP) and the Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP), to reduce emissions from mobile sources.

Main 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 agency's major responsibilities fall into the following categories:

- Implementing state and federal environmental regulatory laws by issuing permits and authorizations for the control of air pollution; the safe operation of water and wastewater facilities; and the treatment, storage, and disposal of hazardous, industrial, and municipal waste and of low-level radioactive waste.
- Ensuring compliance with state and federal environmental laws and regulations by: conducting inspections of regulated facilities, monitoring air and water quality, providing technical assistance, encouraging voluntary compliance, and taking formal enforcement action against suspected violators.
- Developing plans for the cleanup and eventual reclamation of contaminated industrial and abandoned hazardous waste sites, and for the restoration of air and water quality.
- Setting water rates and allocating surface water rights.
- Planning for air quality, water quality, and waste management by developing the State Implementation Plan for attainment of the National Ambient Air Quality Standards, developing total maximum daily loads to improve water quality, and analyzing solid waste generation and management in Texas.
- Ensuring the delivery of 100 percent of Texas' equitable share of water as apportioned by the Texas River Compacts.

Agency Workforce

Size and Composition

The TCEQ has an authorized workforce of 2,942 budgeted full-time equivalent (FTE) positions for fiscal 2008. The average age of TCEQ employees is 44.96 years, which compares to the 44.3 years reported in the *Strategic Plan: Fiscal Years 2007–2011*. The average employee tenure as of Aug. 31, 2007, was 9.14 years, a decrease of 2.74 years from the 11.88 years reported for fiscal 2005.

Officials/administrators, professionals, and administrative support make up more than 94 percent of the entire workforce. The remaining workforce consists predominantly of technical positions (Table 2).

In order to meet agency goals and objectives, the TCEQ supplements its workforce with 29 contracted staff to provide vital program support and to perform various information technology functions. Restrictions on hiring contractors to augment staff resources have kept this number at a low level. Budgetary constraints also limit the agency's ability to obtain contract services.

Location of Employees

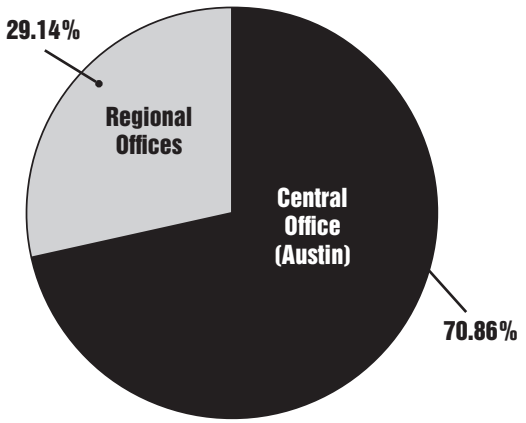
The TCEQ employs staff in the Central Office located in Austin and the 16 regional offices throughout the state. As of Aug. 31, 2007, 825 employees, or 29.14 percent of the total workforce, were located in the regional offices. In an effort to facilitate delivery of the agency's services at the point of contact and to increase efficiencies, 99 (12%) of the regional employees were matrix-managed staff who work in

Table 2. TCEQ Workforce Categories and Average Tenure

Job Category	TCEQ Workforce* FY 2007		Average Tenure (in years)
Official/Administrator	276	9.83%	13.01
Professional	1,804	64.27%	8.65
Paraprofessional	21	0.75%	6.91
Technical	144	5.13%	8.65
Administrative Support	562	20.02%	8.03
Agency Total Workforce	2,807		

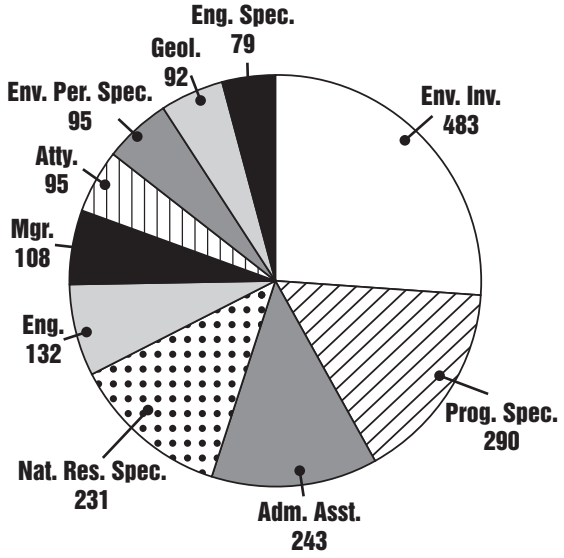
**Actual head count, not FTEs.*
Data Source: Human Resources Information System, as of 8/31/07.

Figure 1. Location of TCEQ Employees



Data Source: Human Resources Information System, as of 8/31/07.

Figure 2. Population at the TCEQ by Job Classification Series, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

a regional office but are supervised from the Central Office. (See Figure 1.)

Human Resources Policies and Procedures

The TCEQ appropriately administers the agency workforce through routine review and revision of human resources policies and procedures. Legislative changes are incorporated into human resources policies, as necessary, every two years. The next regular legislative session will begin Jan. 13, 2009.

Frequently Used Job Classifications

The TCEQ uses a wide variety of job classifications to carry out its mission of protecting and preserving the Texas environment. The ten most frequently used job classification series in fiscal 2007, as displayed in Figure 2, were:

- Environmental Investigator (483)
- Program Specialist (290)
- Administrative Assistant (243)
- Natural Resource Specialist (231)
- Engineer (132)
- Manager (108)
- Attorney (95)
- Environmental Permit Specialist (95)
- Geologist (92)
- Engineering Specialist (79)

Salary

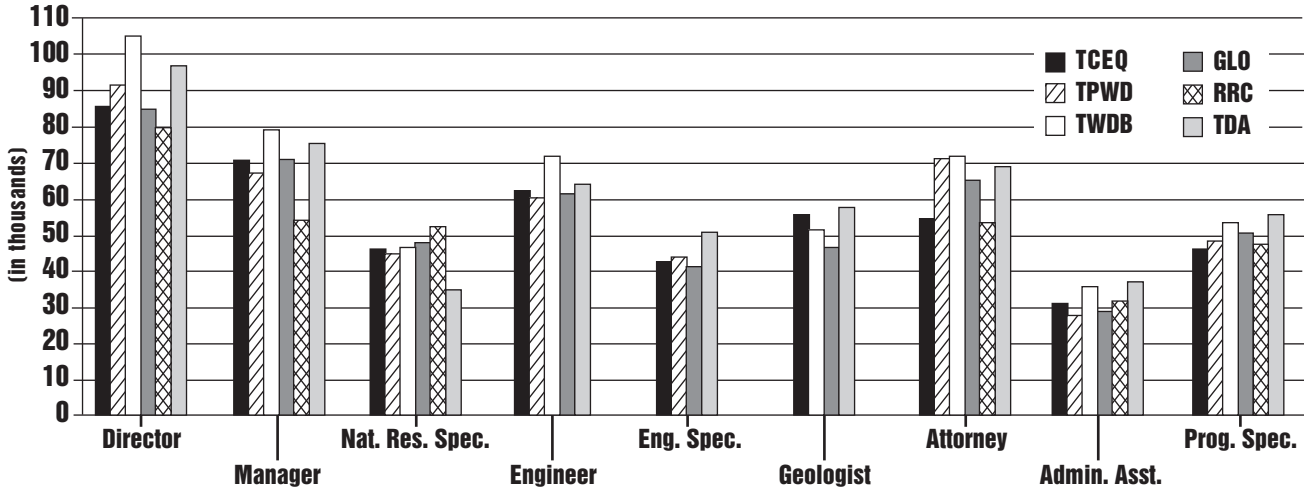
Figure 3 uses data from the Electronic Classification Analysis System (E-Class) maintained by the State Auditor's Office (SAO) to compare the median salaries of widely used entry-level job classifications at several natural resources agencies:

- Texas Parks and Wildlife Department (TPWD)
- General Land Office (GLO)
- Railroad Commission (RRC)
- Texas Department of Agriculture (TDA)
- Texas Water Development Board (TWDB)

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.

Figure 3.
Median Salaries at the TCEQ and Other Texas Natural Resources Agencies, FY 2007



In fiscal 2007, Blacks and Hispanics represented more than 25 percent of the agency's workforce, with other ethnic groups constituting over 6 percent. These percentages remain consistent with the last reporting period of fiscal 2005. See figures 4 and 5 for the ethnicity and gender of the TCEQ workforce in fiscal 2007.

Agency Workforce Compared to Available Statewide Civilian Workforce

Table 3 compares the agency's workforce as of Aug. 31, 2007, to the available statewide civilian workforce as reported in the *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 Texas workforce (ATW) and the TCEQ workforce. The TCEQ employs staff from five employee job categories.

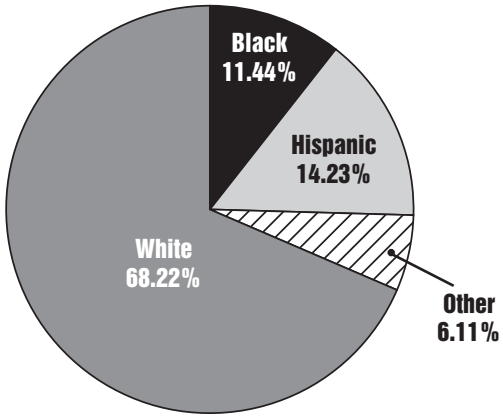
Although minorities and females are generally well represented at the TCEQ, the agency continues to strive to have a workforce that mirrors the available statewide labor force.

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, and other related fields.

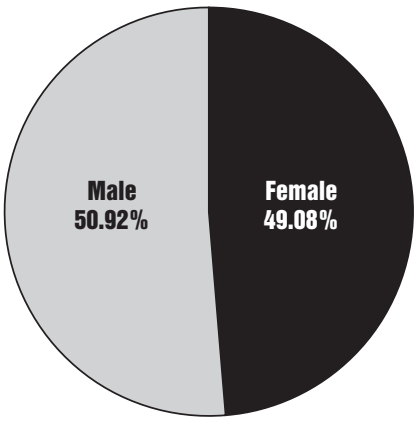
The TCEQ benefits from one of the lowest turnover rates among state agencies, with a fiscal 2007 rate

Figure 4.
Ethnicity of TCEQ Workforce, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

Figure 5.
Gender of TCEQ Workforce, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

Table 3. TCEQ Workforce Compared to Available Texas Workforce, 8/31/07

EEOC Job Category	Black		Hispanic		Female	
	ATW	TCEQ	ATW	TCEQ	ATW	TCEQ
Official/Administrator	6.6%	6.0%	14.2%	10.6%	37.3%	36.4%
Professional	8.3%	9.7%	13.4%	11.3%	53.2%	41.1%
Service & Maintenance*	13.8%	12.0%	40.7%	32.0%	39.0%	68.0%
Technical	12.4%	10.4%	20.2%	17.1%	53.8%	34.2%
Administrative Support	11.2%	20.1%	24.1%	24.1%	64.7%	84.2%

**The "Paraprofessional" category is now included in the "Service and Maintenance" category.*

of 11.8 percent, well below the statewide turnover of 17.4 percent. The agency considers itself to be an "employer of choice" and uses this as a tool to recruit top applicants. 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 almost 800 TCEQ employees (over 27%) projected to reach retirement eligibility during the next five years, the agency faces the potential of a substantial loss of skill and institutional knowledge. This loss will be particularly critical in management and lead technical and program area positions, where the agency relies on the expertise, skills, and knowledge of experienced staff. Table 4 shows a total of 298 agency retirements for fiscal years 2003 through 2007.

On a broad scale, the TCEQ is committed to developing its employees and promoting employee advancement and initiative through career ladders. Career ladders have been established for 21 occupational specialties, and approximately 79 percent of non-management employees are on career ladders. The establishment of structured career progression reflects the agency's business needs and benefits the employees by having defined career advancement opportunities.

Table 4. TCEQ Employee Retirements, FYs 2003–2007

Fiscal Year	Number of Retirees
2003	102
2004	45
2005	67
2006	32
2007	52
Total	**298**

Data Source: Human Resources Information System, as of 8/31/07.

One strategy for preparing the agency's existing workforce for future leadership positions is the Aspiring Leaders Program. This program is designed to provide non-supervisory staff with access to training and development opportunities that will help prepare them for possible advancement into management positions.

Training

The TCEQ places a strong emphasis on enhancing the technical and professional skills of employees. Agency training needs are assessed annually through a survey administered by office training liaisons. This office training liaison group is composed of representatives from each office, as well as from Staff Development and Information Resources.

Whenever possible, the agency seeks to use emerging technologies such as computer-based training, Internet-based training, video teleconferencing, and webcasting.

Challenges and Opportunities

The TCEQ expects a number of 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 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 projected retirement rate of more than 20 percent across the agency, the TCEQ anticipates a potential significant loss of technical skills and institutional knowledge. Likewise, the agency employs staff that are highly marketable in the private sector, making recruitment often difficult.

Organizational Structure

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 five 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 five offices report directly to the commissioners:

- General Counsel
- Chief Auditor
- Chief Clerk
- Public Assistance
- 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.

Buddy Garcia of Austin, who serves as chairman, was appointed on Jan. 25, 2007. His term expires Aug. 31, 2011. Larry R. Soward of Austin was appointed on Oct. 17, 2003. His term will expire Aug. 31, 2009. Bryan W. Shaw, Ph.D., was appointed on Nov. 1, 2007. His term will expire on Aug. 31, 2013.

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 operations of approximately 2,900 employees in 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. Five divisions report directly to the executive director:

- Agency Communications
- Budget and Planning
- Chief Financial Officer
- Intergovernmental Relations
- Small Business and Environmental Assistance

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

- Office of Administrative Services
- Chief Engineer's Office
- Office of Compliance and Enforcement
- Office of Legal Services
- Office of Permitting, Remediation, and Registration

Office of Administrative Services

The Office of Administrative Services provides service and support to agency staff and external customers, supplying the essential administrative infrastructure required to maintain business operations. These services include:

- financial administration
- purchasing, contracts, and contracting with historically underutilized businesses
- information-technology and document management
- human-resources management and staff development
- management and support of assets and physical property

Chief Engineer's Office

The Chief Engineer's Office (CEO) develops and implements statewide and regional plans, rules, strategies, and technical guidance to attain quality standards for air, surface water, and groundwater. This includes a broad range of specific responsibilities:

- Assess the status of air quality, and model outcomes of planning scenarios and compare them against real-world results.

- Assess risks to human health from air and water pollution, and from polluted sites to guide their remediation.
- Implement plans to protect and restore air and water quality in cooperation with local, regional, state, and federal stakeholders.
- Track progress toward environmental goals and adapt plans as necessary.
- Advise the executive director and the deputy directors regarding uniform compliance with engineering standards, specifically regarding executive-level technical and policy matters.
- Review plans, processes, permits, and regulations for scientific accuracy and feasibility.

The CEO also coordinates activities with external organizations and internal offices to:

- develop strategies to implement new legislation, and
- review innovative technologies related to TCEQ regulatory compliance.

In addition, the CEO:

- represents the TCEQ with the Texas Board of Professional Engineers, and
- assists professional engineers within the TCEQ on matters such as licensing requirements and continuing education requirements.

Office of Compliance and Enforcement

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

Office of Legal Services

The Office of Legal Services manages the legal services for the agency in the areas of environmental law, enforcement litigation, and general agency operations. The office's mission is to provide legal counsel and support to the executive director; the program areas; and, in conjunction with the Office of General Counsel and the Office of Public Interest Counsel, the commissioners. The office's goals are to ensure that commission decisions follow the law, and that rules developed by the agency comply with statutory authority and are applied consistently.

Office of Permitting, Remediation, and Registration

The Office of Permitting, Remediation, and Registration is responsible for implementing the federal and state laws and regulations governing all aspects of permitting for the air, water, and waste programs. The office also oversees the investigation and cleanup of hazardous pollutants released into the environment, registers and manages the reporting requirements for certain facilities, and implements the petroleum storage tank reimbursement program. Office staffers in the agency's bankruptcy program pursue debtors in United States bankruptcy courts for recovery of claims owed to the TCEQ.

CHAPTER 2

Geographic Aspects

Geographic 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. There are approximately 381,113 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
2. Lubbock
3. Abilene
4. Dallas–Fort Worth
5. Tyler
6. El Paso
7. Midland
8. San Angelo
9. Waco
10. Beaumont
11. Austin
12. Houston
13. San Antonio
14. Corpus Christi
15. Harlingen
16. Laredo

The total space in the regional offices is 210,780 square feet. In addition to the regional offices, there is 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 lessors, 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 Geographic 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. Without intervention, stress on this sensitive ecosystem may destroy aspects of the lake that make it so valuable to humans and wildlife. Landowners and local entities have banded together with the TCEQ to develop a voluntary watershed protection plan with the goal of improving the aquatic habitat and protecting water quality.

The aquatic plant Giant Salvinia was first discovered on Caddo Lake in July 2006. This invasive plant grows rapidly in clusters to form dense floating mats, cutting off oxygen and sunlight to other aquatic species and severely threatening Caddo Lake. The watershed protection plan, through its various stakeholder groups, provided the necessary structure to respond quickly to the outbreak. Meetings were held with Texas and Louisiana residents and state agencies to discuss the control of Giant Salvinia. A rapid-response plan was developed to increase public awareness and involvement and provide a strategy for preventing the weed from spreading farther.

Since the response plan was developed, signs have been posted at boat launches around the lake informing people of practices that they can implement to prevent the spread of Giant Salvinia, a number of local residents have been trained by Texas Parks and Wildlife Department in the identification of Giant Salvinia and are authorized to dispose of it, and a barrier fence has been put in place near the Texas-Louisiana border to reduce the spread of the aquatic plant into Texas.

The watershed protection plan is also addressing the water quality issues identified in the Clean Water Act Water Quality Inventory and 303(d) List. These include low dissolved oxygen and pH as well as elevated concentrations of mercury in fish tissue. There are also potential concerns related to nutrients and metals. A number of these water quality issues transcend the Texas-Louisiana boundary due to the exchange of water between Texas and Louisiana and the deposition of mercury from the air. The watershed coordinator has been working with the City of Shreveport and a number of interstate organizations to inform them about water quality issues, with the intent of fully engaging them in the activities of the Caddo Lake Watershed Protection Plan. Coordination with Louisiana will increase as the watershed protection plan progresses.

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 in the middle of international watersheds and air basins and their interdependence requires the TCEQ to develop and maintain relationships with Mexican partners at every level to address problems effectively.

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 major part in the economy.

The estimated 2007 population of the 32 counties of the Texas border region, stretching from El Paso to Brownsville, is more than 2.5 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 among the highest in the nation.

Rapid industrial growth and population increases on the Mexican side of the border also affect Texas' border environment, with much of this growth due to economic factors that encourage many Mexicans to migrate to border cities in search of jobs. As of

December 2005, there were 1,169 maquiladoras in the four Mexican states bordering Texas, employing 650,000 people. Many Mexican workers are attracted to the border because of maquiladoras and 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 provide for wastewater treatment and solid waste disposal. The ability to pay for sanitation is fundamental to environmental quality and the well-being of residents. High 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 2006 report by the Texas Secretary of State found that 167,000 colonia residents in the largest border counties still lacked water or sewer service or both.

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 all or parts of seven regional agency offices. This section discusses background, challenges, and planned activities for this region with regard to water resources, waste management, air quality, and natural resources.

Water Resources

Background

Water availability is critical in the border region of Texas and its neighboring states in Mexico, with annual rainfall varying 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 U.S. 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, draining 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 U.S. and created 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 for Texas in 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 60,000 acre-feet a year to Mexico. Most of this water is diverted, resulting in very little flow below Ft. Quitman, creating a "Forgotten River" stretch between El Paso and Presidio.

Groundwater

Groundwater is used in much of the border region. In the El Paso–Ciudad Juárez area, it provides the majority of water. Several aquifers are shared between Mexico and the U.S., 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.

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 U.S. During the 1995–2002 drought 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 for the two reservoirs is Mexico's Río Conchos, the largest Rio Grande tributary. Beginning in Durango state, 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 U.S. and shall: "not be less, as an average amount in cycles of five consecutive years, than 350,000 acre-feet annually."

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 U.S. under terms of the 1944 treaty. The water debt created bilateral problems for many years, reaching the highest levels of government in the two nations. The absence of a definition of the term "extraordinary drought" in the treaty added to the difficulties.

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 are the highest in more than a decade. In addition, in September 2007 the ten U.S.–Mexico governors agreed to define the term "extraordinary drought" for the Rio Grande basin as used in the 1944 Water Treaty, to facilitate the interpretation of treaty compliance in subsequent five-year accounting cycles.

Groundwater

Recent studies have characterized the quantity and quality of the different portions of the Hueco Bolsón in El Paso, showing it could provide fresh water for nearly a century. While Mexico and the U.S. 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

Mexican law requires that waste generated by maquiladoras be returned to the country of origin, and under the La Paz Agreement the U.S. must accept it. Texas received 4,200 tons of municipal solid waste (MSW) from Mexico in fiscal 2006 at two landfills, down from 48,000 tons in fiscal 2004 at six landfills. In CY 2005, Mexico returned 11,000 tons of hazardous and Class 1 nonhazardous waste to 20 Texas facilities for final treatment and disposal.

There have been concerns in years past about proposed facilities that treat, store, or dispose of hazardous and nonhazardous waste in the border region, but as

of August 2006 only 30 of 230 Texas facilities (including MSW facilities) were located in the 100-kilometer border region.

Domestic Waste Issues

Councils of Governments (COGs) develop Regional Solid Waste Management Plans. The TCEQ publishes an annual report of MSW data. 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. Improper scrap-tire disposal is a common complaint among border communities.

Actions and Accomplishments

International Waste Issues

Maquiladora waste currently does not present a problem for Texas capacity, but the TCEQ will continue tracking this issue. The EPA and SEMARNAT exchange reports every six months on border hazardous waste disposal facilities, with the TCEQ providing input for these "Consultative Mechanism" reports.

MSW Disposal

Solid waste planners use "years of capacity remaining" in area landfills for municipal solid waste as a benchmark. The statewide average of 45 years of capacity is considered a very safe margin, allowing ample time to identify new capacity. In the 2007 annual statewide report, as of Aug. 31, 2006, three of the five border-region COGs were below the average, with the two lowest at 16 and 26 years of capacity.

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. Recycling in the border region can reduce waste going to landfills, and the City of El Paso recently instituted a recycling program.

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. In 2007 the City of Eagle Pass collected 29,000 tires in a week and a half in a voluntary tire-collection program and sent them to San Antonio for disposal.

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, the main air quality problems have been experienced in El Paso, which shares its airshed with Ciudad Juárez and parts of New Mexico.

Challenges

El Paso had been in nonattainment for three criteria pollutants: ozone, carbon monoxide, and particulate matter. The need to work with partners in Mexico and New Mexico was solved 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 (JAC).

Actions and Accomplishments

The TCEQ provides administrative support to the JAC and has worked through the JAC to improve air quality in the Paso del Norte region, while expending significant efforts to improve air quality. These activities have included a vehicle inspection and maintenance

program and the use of seasonal fuels, reducing concentrations of the three pollutants. El Paso County is currently designated as attainment for ozone and has also met monitoring requirements in recent years for attainment for both carbon monoxide and particulate matter. Currently the EPA is reviewing the TCEQ's requests for redesignation.

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

A natural resource issue in the region is visibility degradation caused by haze in Big Bend and Guadalupe Mountains national parks. The TCEQ is working with the EPA, the National Park Service, and other states to address this problem. The haze is created by multiple sources of pollution, both within and outside of Texas.

Actions and Accomplishments

On Dec. 5, 2007, the commission proposed revisions to the Texas State Implementation Plan (SIP) for visibility protection at Federal Class I areas. These are areas for which the EPA requires states to make "reasonable progress" in reducing visibility impairment. Big Bend and Guadalupe Mountains national parks are the only two Class I areas in Texas. The TCEQ met its Dec. 17, 2007, federal deadline.

Border 2012: Binational Border Environmental Program

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. Inaugurated in April 2003, Border 2012 allows border residents to develop local environmental priorities by participating in Regional Work Groups (RWGs) along the U.S.–Mexico border. Two of the four RWGs include parts of Texas: the Texas–New Mexico–Chihuahua RWG and the Texas–Coahuila–Nuevo León–Tamaulipas (Four-State) RWG.

The Four-State RWG was split into three geographic Task Forces (Amistad, Falcon, and Gulf) in 2005 to better serve border communities. Local elected officials from both sides of the border serve as co-chairs. Accomplishments include disposal of 237,000 scrap tires by the Amistad Task Force; Nuevo Laredo's hazardous waste disposal program, which is being used as a model for other border Mexican cities in the Falcon Task Force; and ongoing development of a binational regional emergency response plan in the Gulf Task Force.

Infrastructure

To increase water supplies, border communities have taken the lead in Texas in treating saline groundwater for public water supply. The TCEQ has worked with utilities in El Paso and the Lower Rio Grande Valley 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 August 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 September 2007, the ten

U.S.-Mexico border governors endorsed the channel dam, which is only awaiting Mexican federal approval for construction.

The NAFTA-created Border Environmental Cooperation Commission and the North American Development Bank continue to certify and fund projects in Mexico and Texas that will improve water and wastewater infrastructure for Texas residents. These include wastewater projects in Nuevo Laredo and Reynosa that will dramatically increase Rio Grande water quality.

While colonias have been in Texas for decades, it was not until 1989 that Texas enacted legislation to finance water and wastewater projects and halt proliferation of the colonias. State and federal agencies have provided hundreds of millions of dollars for the projects.

The TCEQ also participates with other agencies in work groups chaired by the Colonia Initiatives Coordinator of the Secretary of State to improve conditions in colonias, including the SB 99 (80th Legislature, Regular Session) work group to track infrastructure in border colonias.

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 388 vehicles–319 vehicles (82%) are in the field and 69 vehicles (18%) 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 United States 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 138 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 2008, there will be approximately 47 hybrids and 114 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 Field Operations Division typically needs to replace 33 to 35 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 these criteria, 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.

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/suburbans	Staff or authorized passenger transport	6 years or 100,000 miles
Cargo vans	Cargo hauling	8 years or 100,000 miles

Facility Improvements

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

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 the HUB rules as its own in May 1996. Additional guidance is provided in the TCEQ's Operating Policies and Procedures and Guide to Administrative Procedures (GAP) Manual, and in the Code of Federal Regulation.

HUB Defined

A HUB is defined by the Texas Government Code, Chap. 2161, and 1 TAC § 111.12 as a business (such as a corporation, sole proprietorship, partnership, joint venture, or a supplier contract between a HUB and a prime contractor/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.
- 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.
- 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.

HUB Program Staff

The TCEQ's HUB office is located in the Support Services 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, the U.S. Environmental Protection Agency, 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 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 state's Annual Procurement 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.A. Educate agency staff on HUB statutes and rules through online avenues, teleconferencing, and classroom training.

Strategy 2.1.B. Establish an online HUB vendor contact database for use by purchasers, project managers, and other personnel responsible for procurement of goods and services. This would not be a substitute for the HUB Directory of the State of Texas Comptroller of Public Accounts, but will serve as a secondary or supplemental resource.

Strategy 2.1.C. Create a centralized system for posting bid opportunities or sharing information on bidding opportunities between $5,000 to $25,000 to which vendors may respond.

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.

Table 6. HUB Goals and TCEQ Performance

Category	TCEQ Performance		Goals for 2009–2013
	2006	2007	
Commodity Contracts	41.9%	37.5%	12.6%
Other Services Contracts	33.8%	30.8%	33.0%
Professional Services Contracts	13.3%	20.9%	20.0%

Financial Status and Outlook

Because the TCEQ has a complex funding system–consisting primarily of fee revenue that is appropriated by the Legislature to the agency to support agency operations–the agency is presented with a unique set of challenges.

Funding Sources and Uses

The TCEQ is funded primarily by fee revenues. The agency was appropriated $1.084 billion for the 2008–09 biennium, of which $959 million (88.5%) was from dedicated fee revenues. The remainder of the appropriations consisted of $85.7 million from federal funds, $20.8 million from General Revenue, and $18.8 million in interagency contracts and appropriated receipts.

The appropriations from dedicated fee revenues for the 2008–09 biennium consist of $337.9 million (35.2%) from the Texas Emissions Reduction Plan fund, $200.4 million (20.9%) from the Clean Air Account, $92.2 million (9.6%) from the Water Resources Management Account, $85.6 million (8.9%) from the Waste Management Account, $77.4 million (8.1%) from the Petroleum Storage Tank Remediation Account, $59.2 million (6.2%) from the Operating Permit Account, $56.9 million (5.9%) from the Hazardous and Solid Waste Remediation Account, and the remaining 5.2 percent 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. Some flexibility nonetheless is provided by Rider 15 in the TCEQ's General Appropriations Act, which allows for the reallocation of 7 percent of identified funds for other uses.

Funding Issues

Two of the agency's accounts face unique near-term challenges.

First, the 80th Legislature enacted changes to the Petroleum Storage Tank Program that will affect fee revenue that supports the program. The Petroleum Product Bulk Delivery Fee, which was set to expire at the beginning of fiscal 2008, was extended from Sept. 1, 2007, to Sept. 1, 2011, at a rate equal to one-third the current rate. The Petroleum Storage Tank (PST) Remediation Program's deadline for submitting reimbursement claims and placing sites into the State Lead Program was extended through March 1, 2012. The legislation also eliminated the requirement for tank registration fees beginning in fiscal 2008. These fees were deposited to the Waste Management Account. The agency will use fund balances in this account to support the Petroleum Storage Tank Program. It must be noted, however, that the legislation also allows the commission to reinstate the registration fee if the petroleum delivery fee is discontinued.

Secondly, the 80th Legislature also appropriated the TCEQ a partial restoration of the previous General Revenue funding that was cut during the 79th Legislature. Much of this General Revenue funding was used to support the agency's water programs. However, the Water Resources Management Account fund balance is still being used to support the water programs. Under current projections, the fund balance of the Water Resources Management Account will be almost depleted by the end of the current biennium (fiscal 2009) and will reflect a deficit in fiscal 2010.

In addition to the challenges specific to these two accounts, many of the fees the agency assesses are based on the volume of waste generated or air contaminants emitted. 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 decreases. In time, the agency will need more stable funding sources to support its ongoing operations.

Economic and Population Forecast

Table 7 represents the population and economic forecast for Texas through fiscal 2013.

Table 7. Economic & Population Forecast for Texas & the U.S., FYs 2009–2013, Fall 2007 Forecast

Category	2004	2005	2006	2007	2008*	2009*	2010*	2011*	2012*	2013*
TEXAS										
Gross state product (2000 dollars in billions)	$798.0	$827.1	$858.1	$888.8	$917.5	$943.8	$976.0	$1,007.7	$1,039.8	$1,070.3
Annual percentage change	4.0	3.7	3.7	3.6	3.2	2.9	3.4	3.2	3.2	2.9
Personal income (current dollars in billions)	$681.6	$743.6	$808.6	$874.2	$928.3	$980.3	$1,038.6	$1,096.1	$1,156.7	$1,215.6
Annual percentage change	2.4	2.5	5.3	5.7	5.4	5.6	6.2	6.2	6.7	6.8
Nonfarm employment (in thousands)	9,450.4	9,667.7	9,980.6	10,228.7	10,432.7	10,620.0	10,842.0	11,038.8	11,219.4	11,372.1
Annual percentage change	0.8	2.3	3.2	2.5	2.0	1.8	2.1	1.8	1.6	1.4
Unemployment rate (percentage)	6.2	5.4	5.1	4.4	4.7	4.9	4.9	4.9	4.8	4.9
Texas exports (in billions)	111.3	126.2	145.1	164.9	184.3	202.4	219.2	235.2	251.9	269.0
Resident population (in thousands)	22,421.9	22,827.6	23,432.2	23,775.2	24,158.2	24,536.1	24,905.5	25,263.8	25,617.4	25,962.2
Annual percentage change	1.8	1.8	2.6	1.5	1.6	1.6	1.5	1.4	1.4	1.3
Resident population 17 and under (in thousands)	6,007.3	6,040.6	6,068.7	6,094.1	6,107.0	6,117.5	6,127.1	6,137.1	6,150.2	6,165.5
Annual percentage change	0.5	0.6	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2
Resident population 65 and over (in thousands)	2,178.7	2,210.7	2,246.4	2,287.6	2,341.7	2,400.1	2,458.4	2,511.8	2,608.8	2,707.3
Annual percentage change	1.3	1.5	1.6	1.8	2.4	2.5	2.4	2.2	3.9	3.8
U.S.										
Gross domestic product (U.S. 2000 dollars, in billions)	$10,593.4	$10,925.8	$11,247.3	$11,481.2	$11,713.0	$12,033.9	$12,379.2	$12,716.4	$13,058.8	$13,366.7
Annual percentage change	3.8	3.1	2.9	2.1	2.0	2.7	2.9	2.7	2.7	2.4
Consumer price index (1982–84=100)	187.4	193.5	200.6	205.3	210.0	213.5	217.6	221.6	225.5	229.5
Annual percentage change	2.3	3.3	3.7	2.3	2.3	1.6	1.9	1.8	1.8	1.8
Prime interest rate (percentage)	4.1	5.7	7.6	8.2	7.3	7.4	7.8	7.8	7.8	7.7

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

Technological Developments

Information Strategy Plan

From its inception, the TCEQ recognized that information systems are vital to its ability to accomplish its mission. Beginning in 1998, the agency initiated an Information Strategy Plan to guide the agency toward its vision of information systems that best support its mission. The plan recommended focusing on information systems with these capabilities:

- Identification of regulated entities: The unique identification of the entities (e.g., facilities, licensed operators) that the TCEQ regulates.
- Integration of environmental data: The integration of ambient environmental data to provide an understanding of environmental conditions on a geographic basis.
- Tracking of compliance and enforcement activities: The tracking, compilation, and standardization of compliance and enforcement activities, to enhance planning and compliance and enforcement functions.
- Characterization of regulated entity activities/releases: The compilation of selected information about regulated entities' regulated activities and/or pollutant releases, to enable a multimedia profile of regulated entities.
- Permit development and management: The development of enhanced information support to the tracking of permit development time frames, milestones, and activities, and the sharing of selected permit obligations for regulated entities.
- Management of spatial data: The integration of spatial data components with agency administrative and environmental data systems and processes by: acquiring all spatial datasets required by program areas to accomplish the agency mission; complying with established agency standards for environmental information management that incorporate the spatial or locational component for common agency spatial datasets; maintaining these spatial data in an accessible manner for use by all agency personnel; and providing the standard tools, resources, training, and organizational support necessary to use these spatial data.

The agency has had a number of significant accomplishments since the development of the original plan:

- A structure has been developed for managing information system development at the enterprise level, rather than development being driven exclusively by one business area.
- A Central Registry of regulated entities has been developed, providing an agencywide, multimedia view of whom we regulate.
- A Consolidated Compliance and Enforcement System has been developed that builds on Central Registry and is able to provide a single source of compliance and enforcement information for regulated entities that covers their compliance with all agency programs.
- Information systems to track and report ambient air- and water-quality data have been created.
- An information system to maintain and track files published on the TCEQ public Web site has been developed and is used across the agency.
- A project is under way to procure and customize software to store and manage data from remediation sites.
- A system to visually track contamination or impairment of a natural resource and locate potential sources has been developed using a Geographic Information System.
- Major systems to allow regulated entities to apply for authorizations, report required data, and pay fees online through the agency's external Internet site have been developed.
- We have developed a shared spatial data management infrastructure, approved spatial data standards, developed a spatial data documentation

process, made high-resolution color aerial imagery of the state and other areas available, and developed cost-effective GIS-related training at the TCEQ.

These developments have greatly improved the agency's ability to carry out its environmental and regulatory mission, and have improved service to the regulated community and the public.

Web Site Enhancements

The Agency Communications Division is currently redesigning the home page and upper-level navigation pages of the TCEQ Web site, in order to improve the site's usability and appearance. The process will rely heavily on customer testing and feedback to inform a design that will best meet the needs of the many audiences the TCEQ serves.

In a related effort, the TCEQ Web site has been enhanced to include live webcasting of public meetings held by the commission. Under an agreement with TexasAdmin.com Inc., webcasts are transmitted when the commissioners meet in open session to consider permit applications, enforcement actions, and other agency business, as well as to discuss TCEQ programs and policies with staff. Webcasts are also provided for other major agency public meetings, such as those of the Municipal Solid Waste Management and Resource Recovery Advisory Council and the Pollution Prevention Advisory Committee.

TexasAdmin.com maintains a six-month archive of the public meetings, which can be viewed by agenda item. This free service makes it easier for the public to follow the process of environmental regulation, such as hearing the discussions that precede the commissioners' policy decisions. The webcast link can be found on the TCEQ home page.

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 of all stripes will become more sophisticated in their use.
- 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.
- 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. The TCEQ is 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 the TCEQ to better manage and analyze information to support increasingly challenging decisions. Now, more than ever, the TCEQ needs information systems that:

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

The TCEQ will continue to maintain information systems that:

- Integrate key facility information across regulatory program areas.
- Integrate key agency activity information across agency functions (e.g., compliance, 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.

In additions to these items, the TCEQ will strive to plan and implement information systems or processes that:

- Expand permit development and management activities.
- Provide public access to TCEQ data and services.
- Enable data exchange using state and federal standards.
- Enable the use of mobile devices where opportunity exists.
- Enable better access to information through reporting systems.
- Enhance information security.

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. 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 affect on the TCEQ, its workload, and its responsibilities.

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

Federal Resource Conservation and Recovery Act
(the major federal solid waste law)

Federal Clean Air Act

Federal Clean Water Act

Federal Safe Drinking Water Act

Federal Insecticide, Fungicide, and Rodenticide Act
(as it pertains to water quality)

Atomic Energy Act of 1954
(the major federal law concerning low-level radioactive waste disposal)

Comprehensive Environmental Response, Compensation, and Liability Act
(the major Superfund law)

Administration

The EPA's Cross-Media Electronic Reporting Rule (CROMERR), effective Jan. 11, 2006, applies to all EPA-approved, -authorized, or -delegated programs and establishes new standards for all required electronic reporting of regulated activities to the TCEQ.

Air Quality

Federal initiatives to address the following issues have, or are expected to, affect the TCEQ's air quality permitting and compliance programs:

- New Source Review – reforms of federal operating permit program.
- Clean Air Interstate Rule/Clean Air Mercury Rule – establishing permit limits for electric generating facilities.
- Best Available Retrofit Technology – to address regional haze issues in national parks and wilderness areas.
- Particulate Standards – new standards would affect agency ambient air monitoring requirements and revisions to state implementation plans.
- New Ozone Standards – new standards finalized in March 2008 would affect agency ambient air monitoring requirements and require revisions to the state implementation plan to address newly designated nonattainment areas within the state.

Groundwater Protection/Remediation

Provisions of the National Energy Policy Act of 2005 will require significant increases in the compliance monitoring of underground petroleum storage tanks.

Water Supply/Water Quality

- New federal groundwater disinfection requirements, projected to be adopted in late 2006, will affect approximately 5,800 of the total 6,700 public water systems in Texas regulated by the TCEQ.

- Increasingly stringent federal standards for drinking water and drinking water treatment, and the extension of these standards to smaller public water systems, will continue to affect the TCEQ's compliance and enforcement programs, its technical assistance to water systems, and public concerns about the quality of drinking water supplies.
- Pretreatment Streamlining Regulations will require the TCEQ to revise program requirements for all authorized municipal wastewater pretreatment programs in Texas.
- Expansion of the federal program under Section 316b of the Clean Water Act established technology-based performance standards for cooling water intake structures and will require the TCEQ to perform significant statistical and cost-benefit analyses in authorizing these facilities.
- Concentrated Animal Feeding Operation (CAFO) Permits. Continued implementation of EPA changes to CAFO requirements include the review of nutrient management plans.

The 80th Legislature

During the 80th Legislature, omnibus water legislation passed, which included major legislative revisions affecting environmental review for water permitting, water conservation and rainwater harvesting, regulation of irrigation systems, CCN changes, designation of unique reservoir sites, and increased permitted groundwater withdrawals for the Edwards Aquifer (HB 3, HB 4, SB 3). An omnibus air bill passed that made changes to two air quality programs, Low-Income Repair Assistance and Accelerated Vehicle Retirement Program (LIRAP) and the Texas Emissions Reduction Plan (TERP), by providing greater incentives for reducing NO_X emissions (SB 12).

Additionally, the Legislature transferred the regulation and licensing of commercial processing and storage of radioactive substances from the DSHS to the TCEQ (SB 1604).

Budgetary Issues

After a substantial decrease in general revenue during the previous biennium, the Legislature provided approximately $17.38 million in general revenue for water-related programs for the 2008–09 biennium, an increase of $9.15 million. Other exceptional item requests that were granted included an increase in TERP appropriations by $80.73 million, and $11.8 million made available for the Clean School Bus Program.

Several contingency riders were included in the appropriations bill to assist the agency in implementing newly adopted laws for the biennium. Those riders include almost $900,000 in general revenue to support the implementation of SB 3, and $1.9 million in general revenue for 15 FTEs (11 transferred from the DSHS to the TCEQ, plus four new ones) to support implementation of SB 1604.

Air Quality Issues

The significance and importance of the Texas Emissions Reduction Plan (TERP) in meeting federal ozone standards continues to be recognized by the Legislature through the passage of SB 12. This legislation also provided $90 million in funding for the Low-Income Repair Assistance and Accelerated Vehicle Retirement Program (LIRAP), which is now known as AirCheck-Texas Drive a Clean Machine.

The permitting of proposed electric generation facilities garnered significant interest during the legislative session. A great deal of legislation was introduced focusing on limiting the construction and emissions from electric generating units, and the production of clean energy. In December 2007, the Speaker of the House announced the creation of the House Select Committee on Electric Generation Capacity and Environmental Effects, which is charged with studying the state's demand for electric generation capacity for the next 50 years and preparing a long-term electric energy and environmental impact plan.

Increasing concerns about air toxics and unauthorized emissions from industrial sources resulted in a number of bills being introduced, but no adoption of significant new requirements.

Water Resource Issues

Comprehensive water legislation was passed during the 80th Legislature. Through the passage of HB 3, HB 4, and SB 3, the environmental review for water rights permitting was changed from a case-by-case basis to an environmental standards-by-rule process. These bills also created an Environmental Flows Advisory Group.

Efforts were successful to further address water conservation efforts by establishing the Water Conservation Advisory Council. As part of that effort, retail public utilities that provide water service to a population of 3,300 or more are required to submit water conservation plans.

Water Utility Issues

Building on legislation passed during the previous session, changes were made regarding the process for granting a certificate of convenience and necessity (CCN). SB 3 included special conditions that a municipality may be subject to when acquiring a CCN beyond its extraterritorial jurisdiction, as well as a reduction in the number of acres a landowner must own to receive mailed, individual notice of a CCN application.

Waste Management/Solid Waste Issues

Met with broad-based support, the 80th Legislature established a computer-equipment recycling program requiring computer manufacturers to establish free and convenient programs to collect and recycle their own brand of computers sold to consumers (HB 2714).

In the area of groundwater protection and pollution remediation, two significant initiatives were successfully enacted. The Legislature extended until Sept. 1, 2011, the program to reimburse owners of leaking underground petroleum storage tanks for the costs of remediation and authorized the TCEQ to address sites that remain contaminated after that date (HB 3554). That legislation also extended the petroleum product fees that support the program to ensure support of the effort. Also, the agency was given authority to order an owner or operator of an underground storage tank who fails to maintain acceptable evidence of financial responsibility to place the tank out of service (HB 1956).

In addition, legislation was passed that revised the eligibility requirements for the dry cleaner remediation program and the dry cleaner remediation fund. Under the new law, registration and fee payment by property owners (POs) and preceding property owners (PPOs) is required to be eligible for fund benefits (HB 3220).

Examples of Bills from the 80th Legislature Affecting the TCEQ

The following is a partial list of bills passed during the 80th Legislature that will affect agency operations:

House Bills

HB 3	Relating to the management of the water resources of the state, including the protection of instream flows and freshwater inflows.
HB 4	Relating to water conservation.
HB 160	Relating to a study on the relocation of freight trains away from residential areas of the state.
HB 1254	Relating to environmental permitting fees and electronic reporting.
HB 1391	Relating to the provision of water and utility service.
HB 1526	Relating to incentives for and the use of supplemental leak detection technologies for air contaminants.
HB 1656	Relating to the regulation by municipalities of irrigation systems and irrigators.
HB 1956	Relating to the financial responsibility requirements applicable to owners or operators of underground storage tanks.
HB 2018	Relating to eligibility for a municipal setting designation related to potential impacts to groundwater quality of solid waste activities.
HB 2482	Relating to the requirements for certification to provide training to an owner of an on-site sewage disposal system using aerobic treatment in maintaining the system.

HB 2541 Relating to certain requirements concerning solid waste facilities, including recycling facilities.

HB 2654 Relating to the regulation of the use of an injection well to inject nonhazardous brine from a desalination operation or to inject nonhazardous drinking water treatment residuals.

HB 2714 Relating to a program for the recycling of computer equipment of consumers in this state; providing administrative penalties.

HB 3098 Relating to the fees imposed by the Texas Commission on Environmental Quality in connection with plans that are subject to review and approval under the commission's rules for the protection of the Edwards Aquifer.

HB 3220 Relating to the environmental regulation and remediation of dry cleaning facilities.

HB 3554 Relating to the program for the regulation and remediation of underground and aboveground storage tanks.

HB 3732 Relating to the implementation of advanced clean energy projects and other environmentally protective projects in this state.

HB 3838 Relating to regulation of injection wells used for in situ uranium mining by the Commission on Environmental Quality.

Senate Bills

SB 3 Relating to the development, management, and preservation of the water resources of the state.

SB 12 Relating to programs for the enhancement of air quality, including energy efficiency standards in state purchasing and energy consumption; providing penalties.

SB 1037 Relating to the prevention of surface water or groundwater pollution from certain evaporation pits.

SB 1436 Relating to the transfer of responsibility for the National Flood Insurance Program from the Texas Commission on Environmental Quality to the Texas Water Development Board and to the administration and funding of the program and to the creation of a center to study elevation and related data; providing for the imposition of penalties.

SB 1604 Relating to responsibilities of certain state agencies concerning radioactive substances; imposing fees and surcharges; providing administrative and civil penalties.

SB 1672 Relating to nitrogen oxide allowance allocation adjustments and the incorporation of modifications to federal rules under the state implementation plan.

SB 1673 Relating to the period after which a preconstruction permit issued or renewed by the Texas Commission on Environmental Quality under the Texas Clean Air Act is subject to review.

SB 2000 Relating to a program to reduce the emissions of nitrogen oxides from certain stationary compressor engines.

Significant Court Cases

Decided Cases

Decided Cases–Air

Massachusetts v. EPA

127 U.S. Supreme Court 1438 (2007)

Petition Summary: This case challenged the EPA's denial of a petition for rulemaking requesting that the EPA regulate greenhouse gas emissions from motor vehicles. The EPA denied the petition. The D.C. Circuit Court of Appeals upheld the EPA's contention that it lacked statutory authority to regulate greenhouse gas emissions from motor vehicles; and the U.S. Supreme Court reversed and remanded the D.C. Circuit, finding that the EPA did have statutory authority to regulate greenhouse gas emissions from motor vehicles, and that Massachusetts had standing to challenge the denial of the petition.

Impact on the TCEQ: Action by the EPA to regulate greenhouse gases from motor vehicles would have little impact on the TCEQ, since states are preempted from regulating motor vehicles; however, if the EPA were to finalize broader regulations relating to greenhouse gas emissions, then the TCEQ would potentially be required to implement the new regulations.

South Coast Air Quality Management District v. EPA

472 F. 3d 882 (D.C. Circuit 2006), motion granted by, rehearing denied by, amended by 2007 U.S. Court of Appeals, Lexis 13303 (D.C. Circuit, June 8, 2007)

Petition Summary: The case involves litigation challenging the EPA's final 8-hour ozone National Ambient Air Quality Standards (NAAQS) Phase I Implementation Rule. Phase I addressed classifications, antibacksliding requirements, 1-hour ozone revocation, and other requirements for mandatory and discretionary control measures. The court issued an opinion Dec. 22, 2006, vacating and remanding the Phase I Rule. The court upheld the revocation of the 1-hour ozone standard, but rejected the EPA's classification of certain areas under Subpart 1 of the Federal Clean Air Act (FCAA). Additionally, the court found that the anti-backsliding provisions of the FCAA require that NSR provisions that applied under the 1-hour ozone standard continue to apply under the 8-hour ozone standard; that FCAA, § 185, fees must be enforced under the 1-hour ozone standard; that contingency plans under the 1-hour ozone standard must remain in place; and that motor vehicle emission budgets for the 1-hour ozone standard must be retained under the 8-hour ozone 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: The decision partially vacating and remanding the EPA final rule will potentially require the TCEQ to develop and submit revised plans for attainment and maintenance of the 8-hour ozone NAAQS. Additionally, reinstituting 1-hour ozone requirements for NSR permitting will require additional permitting actions for both NSR permits and Title V permits. Lastly, since the Houston-Galveston-Brazoria area did not attain the 1-hour ozone standard by its attainment date of Nov. 15, 2007, FCAA, § 185, fees may apply in that area.

State of New Jersey v. EPA

2008 U.S. Court of Appeals, Lexis 2797 (D.C. Circuit, 2008)

Petition Summary: This case challenges the delisting of power plants as subject to the hazardous air pollutant program and the creation of the Clean Air Mercury Rule (CAMR) that established standards of performance for mercury emissions from coal-fired power plants and created a cap-and-trade program to reduce mercury emissions. The court issued an opinion on Feb. 8, 2008, vacating both the delisting rule and the CAMR, finding that the delisting of mercury as a hazardous air pollutant was unlawful.

Impact on the TCEQ: The vacatur of both the delisting rule and the CAMR will potentially affect how power plants are regulated in Texas, relating to mercury. While it is expected that the D.C. Circuit decision will be appealed, the TCEQ may be required to create mercury standards on an individual permit basis until the EPA finalizes mercury regulations for power plants on a source category basis through a maximum achievable control technology (MACT) standard. Additionally, since the CAMR was vacated, the TCEQ will not be implementing the CAMR in Texas.

Blue Skies Alliance v. Johnson

2008 U.S. Court of Appeals, Lexis 2746 (5th Circuit, 2008)

Petition Summary: This nondiscretionary duty litigation challenged the EPA's failure to determine whether the DFW area failed to attain the 1-hour ozone standard. Several environmental groups including Blue Skies Alliance, Downwinders at Risk, Public Citizen, and Sierra Club filed a citizen suit against the EPA. The plaintiffs alleged that the EPA failed to fulfill its nondiscretionary duties to: (1) find that DFW did not achieve attainment by the deadline of Nov. 15, 1999, for serious areas; (2) reclassify the DFW area to

"severe" status; (3) act to disapprove all pending SIP submittals including Rate of Progress and attainment demonstrations; and (4) identify requirements to meet all SIP requirements within 12 months. The State of Texas was an intervenor and the case was settled except for the remaining issue, raised by the plaintiffs, regarding the state's liability for attorney fees incurred in the filing and settlement of the case. The fee request is non-specific; however, the amount ranges between $50,000 and $75,000. The state responds that the settlement agreement controls and should not be reopened, and courts are reluctant to award attorneys' fees against intervenors given the type of language regarding attorneys' fees found in the Clean Air Act. On Aug. 10, 2006, the District Court awarded attorney fees against the TCEQ and the TCEQ appealed to the 5th Circuit Court of Appeals. The 5th Circuit issued an unpublished opinion on Feb. 7, 2008, reversing the award of attorney fees to Blue Skies Alliance because they did not achieve success against the TCEQ on the merits of the underlying case against the EPA.

Impact on the TCEQ: The state will not pay attorney fees to plaintiffs in this case, and was also awarded its costs of appeal. Future decisions regarding intervention should still be made cautiously, in order to mitigate the potential for attorney fee awards. This narrow holding does not mean that attorney fees would never be awarded against state agency intervenors.

Decided Cases–Water

Waterkeeper Alliance, Inc. v. EPA

399 F. 3d 486 (2d Circuit, 2005)

Petition Summary: The case involved an environmental group's challenge to the EPA's rules regarding Confined Animal Feeding Operations (CAFOs). The Second Circuit vacated a portion of the EPA's rules that allowed a permitting authority to issue CAFO permits without reviewing the nutrient management plans (NMPs) and without including the NMP terms in the permit. Also, the Second Circuit found that the rules must expressly provide an opportunity for a public meeting to provide public input on the NMPs. In addition, the Second 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.

Impact on the TCEQ: Currently, all CAFO operations are required to have NMPs. The TCEQ is reviewing the NMPs prior to issuing authorization under the CAFO general permit and the NMPs are also reviewed for individual CAFO permits. In addition, the current general permit provides for a public meeting for new or expanding CAFOs if significant public interest exists, but not for existing CAFOs. Since the Second Circuit ruling does not distinguish between new and existing operations, the TCEQ may have to address the public participation issue in its rules and the general permit. The Second Circuit holding that CAFOs do not have an obligation to seek NPDES permit coverage if they do not have a potential to discharge could result in a challenge to the TCEQ's CAFO rules found in 30 TAC § 321.33. The rules provide that all CAFOs must obtain authorization under an individual or general permit. The EPA proposed rule changes in June 2006 to address the *Waterkeeper* decision, but has yet to issue final rules. Also, in March 2008 the EPA proposed additional rule changes to address the duty to apply holding in this case.

Environmental Defense Center v. United States Environmental Protection Agency

344 F. 832 (9th Circuit, 2003)

Petition Summary: This case is a constitutional challenge to aspects of the EPA's general permit for small municipal separate storm sewer systems (MS4s). The court found that the statutory criterion of pollutant reductions to "the maximum extent possible" was not met because of the EPA's failure to review applications and found that the EPA had failed to provide an opportunity for public comment on each application. The Ninth Circuit remanded the rules to the EPA for further action consistent with its opinion.

Impact on the TCEQ: The TCEQ issued its small MS4 general permit in August 2007 and the

permit included provisions to specifically address the problems the court found with the EPA's rules. The TCEQ is reviewing the NOIs for each small MS4 prior to finalizing coverage. The general permit also includes a public participation process.

South Florida Water Management District v. Miccosukee Tribe of Indians

541 U.S. Supreme Court 95 (2004)

Petition Summary: The case involved the flood control and pumping operations of a water management district within Florida's Everglades. The Eleventh Circuit Court of Appeals had affirmed the district court's ruling that the pumping station between two canals required an NPDES permit. 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, however, 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 waterbody to another would not require a NPDES permit because the definition of "navigable waters" includes all waters of the United States. There has been no subsequent court action since the ruling. In August 2005, the EPA filed a Motion for Summary Judgment in a related case, *Friends of the Everglades v. South Florida Water Management District,* arguing that the water district was entitled to summary judgment because NPDES does not apply to water transfers. The motion was denied; therefore, the case remains pending before the district court. The EPA also issued a memo in August 2005 concerning the agency's interpretation on the applicability of Section 402 of the Clean Water Act to water transfers. This memo concludes that Congress did not intend to subject water transfers to the NPDES program.

Impact on the TCEQ: The case has the potential to affect TCEQ's ability to approve interbasin transfers without a federal or state water quality discharge permit.

Texas Commission on Environmental Quality v. The City of Uncertain

Texas Supreme Court of Texas
No. 03-1111 (filed in 2002)

Petition Summary: The executive director issued an amended Certificate of Adjudication to the City of Marshall without public notice to add industrial use to its municipal use for its authorized diversion of 16,000 acre-feet from Cypress Creek. The City of Uncertain and other persons appealed to the Travis County District Court arguing that they were affected persons and notice and an opportunity for hearing should be provided. The City of Marshall and the Commission argued that based on Texas Water Code, § 11.122(b), no notice was required because Marshall did not request to take more water, to take water at a faster diversion rate, or to change the location of the diversion point. The district court reversed in favor of the plaintiffs and the Austin Court of Appeals affirmed. The City of Marshall and the Commission filed a petition for review with the Texas Supreme Court. The Supreme Court issued an opinion on June 9, 2006, affirming in part, and reversing in part.

Impact on the TCEQ: In January 2008, the Commission held a work session to determine how to proceed after the Supreme Court's decision. The Commission has decided to hear all of the applications that have been affected by this opinion in order to approve or disapprove the ED's decision on notice. This procedure will take place for six months.

Pending Cases

Pending Cases–Air

Chamber of Baton Rouge v. EPA

D.C. Circuit Court of Appeals
Cause No. 16-1046 (filed in 2006)

Petition Summary: This case challenges the EPA's final 8-hour ozone NAAQS Phase II Implementation Rule. Phase II addressed, *inter alia,* NSR elements, reasonable further progress, reasonably available control measures, reasonably available control

technology, reformulated gasoline, emissions inventory requirements, ozone transport region requirements, and ambient monitoring requirements. The State of New Jersey and the Natural Resource Defense Council have also petitioned for review of the rule.

Impact on the TCEQ: A decision vacating or remanding the EPA final rule will affect how Texas develops and submits plans for attainment and maintenance of the Phase II 8-hour ozone NAAQS.

State of North Carolina v. EPA

D.C. Circuit Court of Appeals
Cause No. 05-1244 (filed in 2005)

Petition Summary: This case challenges the EPA's final Clean Air Interstate Rule that established a regional electric generating unit NO_X and SO_2 cap-and-trade program.

Impact on the TCEQ: A decision vacating or remanding the EPA final rule will affect how Texas develops and submits plans for demonstrating how Texas is dealing with transported PM 2.5 and ozone pollution transport to other states.

Galveston-Houston Association for Smog Prevention (GHASP) v. EPA

5th Circuit Court of Appeals 06-61030

Petition Summary: This is a petition for review in the Fifth Circuit challenging the EPA's approval of the TCEQ's SIP revision for the Houston-Galveston-Brazoria (HGB) 1-hour nonattainment area filed on Nov. 3, 2006. Specifically, the challenge concerns rules adopted by the TCEQ regarding control of HRVOCs and the associated emissions cap-and-trade program; changes to the emission credit banking and trading program and to the mass emissions cap-and-trade program for NO_X emissions; revisions to the SIP that apply to the HGB ozone nonattainment area; and conditional approval of the discrete emission credit banking and trading program. GHASP requests the Court find that the EPA's final actions to approve these revisions are not in accordance with the law, and are arbitrary and capricious. GHASP asks the Court to vacate the actions challenged, declare that such actions are void *ab initio,* and revoke the Texas SIP as it concerns the HGB nonattainment area. In addition, GHASP seeks costs of litigation including attorney fees. Motions to Intervene were filed by BCCA Appeal Group, and jointly by Harris, Brazoria, and Fort Bend counties and the City of Houston.

Possible Impact on the TCEQ: Given the December 2006 decision in *South Coast Air Quality Management District v. EPA* (see above), it is unclear what action the EPA will take with regard to the HGB 1-hour ozone SIP if GHASP prevails in this case.

Pending Cases–Water

U.S. Bureau of Reclamation v. Elephant Butte Irrigation District

MV/RLP U.S. District Court, District of New Mexico
Cause No. CV 97-0803 (filed in 1997)

Petition Summary: The U.S. Bureau of Reclamation (Bureau) sued the State of New Mexico, Elephant Butte Irrigation District, the El Paso County Water Improvement District No. 1, and the City of El Paso, claiming that the water in Elephant Butte Reservoir belongs to the Bureau. The State of Texas moved to intervene. The federal district court dismissed the case and all counterclaims. The Bureau and El Paso Water Improvement District No. 1 appealed, and the case was heard in November 2001. The Tenth Circuit, in *United States v. City of Las Cruces* (2002), abated the Bureau's suit and held that the states should adjudicate this issue first before the federal court became involved. The TCEQ has finished adjudicating the Upper Rio Grande Basin. However, New Mexico's adjudication will likely be going on for some time.

Impact on the TCEQ: An agreement or court ruling that limits the State of Texas' ownership or right to regulate water in the Bureau's reservoirs could make the state subject to federal government administration of water rights in Elephant Butte.

San Marcos River Foundation v. Texas Commission on Environmental Quality

Travis County District Court
Cause No. GN3-01925 (filed in 2003)

Caddo Lake Institute, Inc. v. Texas Commission on Environmental Quality
Travis County District Court
Cause No. GN4-00132 (filed in 2004)

Galveston Bay Conservation and Preservation Association, Galveston Bay Foundation, and Matagorda Bay Foundation v. Texas Commission on Environmental Quality
Travis County District Court
Cause No. GN4-00160 (filed in 2004)

Summary of Petitions: The San Marcos River Foundation filed a water rights application with the TCEQ for approximately 5 million acre-feet of water for instream uses for environmental purposes in the Guadalupe River. The Caddo Lake Institute, Inc., filed an application for 2.15 million acre-feet of water for instream uses in the Cypress River Basin. The Galveston Bay Conservation and Preservation Association and the Galveston Bay Foundation filed an application for 3.8 million acre-feet per year in the Trinity River Basin, Trinity–San Jacinto Estuary, and Galveston Bay for instream uses and freshwater inflows. The Matagorda Bay Foundation filed an application for 663,774 acre-feet per year in Matagorda Bay for non-consumptive instream use and freshwater inflow.

The TCEQ denied these applications, determining that it did not have jurisdiction to issue new permits solely for instream uses. The petitioners appealed to the Travis County District Court, claiming that the TCEQ erred in this determination. The cases were consolidated and on Feb. 7, 2006, the district court granted summary judgment to the plaintiff-petitioners, determined that the TCEQ did have the authority to issue instream permits, and remanded the case for hearing. However, the case is not yet final and appealable because several issues still need to be decided, including whether the applications will retain their original priority date upon remand. Caddo and the TCEQ signed a Rule 11 Agreement on March 1, 2006, agreeing that the Order was not final and that the parties will try to agree to a schedule, and if they cannot, to a hearing on a schedule. The SMRF and Galveston Bay cases were heard by the Corpus Christi Court of Appeals. Oral argument was held Oct. 25, 2007. No opinion has been issued as of March 20, 2008.

Impact on the TCEQ: If the TCEQ decision on these instream-use applications is reversed, the TCEQ will have to consider issuing new permits for instream-use applications that were filed prior to SB 1639 (78th Session, 2003). SB 1639 enacted Water Code § 11.0237, effective until Sept. 1, 2005, which provided that the Commission could not issue a new permit for instream flows dedicated to environmental needs or bay and estuary inflows. If the TCEQ decision is upheld, then the TCEQ will not be required to issue new permits for instream use.

Pending Cases–Enforcement

Thomas J. Maloney and Iso-Tex v. The State of Texas
Travis County District Court
Cause No. GN503503 (filed in 2005)

Petition Summary: This case is a constitutional challenge to the TCEQ's decommissioning rules (30 TAC §§ 336.615(3) and 336.619(a)) for inactive radioactive waste sites. It also challenges the statutes that grant the TCEQ authority to adopt regulations for the disposal of radioactive waste. Other defenses plead by the plaintiff include innocent landowner defense and impossibility of compliance. Since the case was filed in 2005, the case has been referred to mediation. Through mediation, the plaintiff agreed to and has submitted a decommissioning plan. Sampling is currently being conducted at the site in accordance with the decommissioning plan.

Impact on the TCEQ: If the rules are found to be unconstitutional, the TCEQ would not be able to require decommissioning of inactive radioactive waste sites.

Part III

Current Activities and Opportunities for Improvement

Air Quality Issues

Water Quality Issues

Waste Issues

Other Key Issues

Air Quality Issues

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

SIP Revisions and National Ambient Air Quality Standards (NAAQS)

Since the early 1970s, the EPA has delegated to the State of Texas the responsibility to monitor for compliance with the National Ambient Air Quality Standards (NAAQS). The NAAQS were established to protect the public from exposure to harmful amounts of the following air pollutants: ozone, lead, carbon monoxide, sulfur dioxide, nitrogen dioxide, and respirable particulate matter.

Attaining the ozone standard is the biggest air quality challenge in Texas. The EPA is required to review each criteria pollutant on a periodic basis to determine if the health-based standard is sufficient to protect public health.

On Dec. 18, 2006, the EPA revised the 24-hour fine particulate matter ($PM_{2.5}$) NAAQS. On Dec. 18, 2007, the governor submitted to the EPA his recommendation that all areas of Texas meet the standard.

On March 12, 2008, the EPA revised the 1997 8-hour ozone NAAQS of 0.08 parts per million (ppm) by lowering the standard to 0.075 ppm. A recommendation from the governor to the EPA on ozone nonattainment area designations and boundaries is due no later than March 12, 2009. Several new areas in Texas are expected to become nonattainment under this new ozone standard.

On May 20, 2008, the EPA proposed to lower the NAAQS standard for lead from the current 1.5 micrograms of lead per cubic meter of ambient air (µg/m3). The EPA is accepting comments for the proposal, which would set the new level in the range from 0.1 µg/m3 to 0.3 µg/m3. The TCEQ did comment on the EPA's Advanced Notice of Proposed Rulemaking and does plan to comment on the proposed changes to the NAAQS for lead.

The agency's earlier comments stressed that there are multiple pathways for lead exposure, including food, consumer products, paint in old housing, and ambient air. Because there are multiple pathways, meeting a NAAQS for lead, no matter how low the standard is, cannot ensure protection of public health from lead toxicity. Instead, a NAAQS for lead is only one of a number of risk-reduction steps that must be taken to protect public health.

The EPA was encouraged to select a reasonable level that does not divert public health resources from more effective efforts to reduce public exposure to the main sources of potential lead poisoning, which are lead from paint in houses, consumer products, and contaminated soil. The EPA is under court order to publish the final rule on the lead standard in the Federal Register by September 15, 2008.

Collin County Ten-Year Maintenance Plan for Lead

The EPA designated a portion of Collin County as a lead nonattainment area on Nov. 6, 1991. The EPA approved the Collin County lead SIP on Nov. 29, 1994. On Aug. 31, 1999, the governor submitted to the EPA a request that Collin County be redesignated to attainment. The request included a maintenance plan demonstrating how the state would assure maintenance of the lead standard in Collin County for the next ten years. The EPA redesignated the Collin County area to attainment effective Dec. 13, 1999. The TCEQ anticipates developing a second ten-year maintenance plan to submit to the EPA in late 2008, as required by the FCAA.

Houston-Galveston-Brazoria Area

Currently, the Houston-Galveston-Brazoria (HGB) area is designated nonattainment for the 1997 8-hour ozone

NAAQS. Counties included in this nonattainment area are Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. The region is classified as "moderate" nonattainment with an attainment date of June 15, 2010. On June 15, 2007, SIP revisions and a letter from the governor were submitted to the EPA requesting that the EPA reclassify the area from moderate to severe. One SIP revision documented compliance with the 15 percent reasonable further progress requirement through 2008. The second SIP revision was the first step in addressing the 8-hour ozone attainment demonstration requirements and includes voluntary mobile source emission reduction commitments made by the Houston-Galveston Area Council and the TCEQ, Chapter 115 Volatile Organic Compound (VOC) rules, and Chapter 114 Texas Low Emission Diesel (TxLED) for Marine Fuels rules.

On Dec. 31, 2007, the EPA proposed to grant the request by the governor to voluntarily reclassify the HGB ozone nonattainment area from a moderate area to a severe 8-hour ozone nonattainment area with an attainment date as expeditiously as practicable, but no later than June 15, 2019. On Jan. 30, 2008, the TCEQ submitted comments to the EPA that support the reclassification and attainment of the standard as expeditiously as practicable, but no later than June 15, 2019. The TCEQ also provided justification for an April 15, 2010, HGB SIP submittal date.

Currently, the TCEQ, using a stakeholder process, is developing the principal components for the 8-hour attainment demonstration for the HGB area: photochemical modeling demonstration and control strategy development. Development of a new reasonable further progress SIP should be completed concurrent with the attainment demonstration SIP. Identifying technologically and economically feasible and reasonable control measures is extremely challenging, considering the magnitude of controls put in place to reduce emissions under the 1-hour ozone standard (see discussion below). Furthermore, the TCEQ is federally pre-empted from directly regulating some emission source categories that significantly contribute to ozone formation in the area, specifically on-road and non-road engines. Meeting the ozone standard is especially complicated for the HGB region due to unique meteorological conditions, complex ozone formation chemistry, and the magnitude of reductions required.

Dallas–Fort Worth Area

The Dallas–Fort Worth (DFW) area is currently designated nonattainment for the 1997 8-hour ozone standard. The area is classified as a "moderate" nonattainment area with an attainment date of June 15, 2010. The DFW counties included in the nonattainment area are Collin, Dallas, Denton, Tarrant, Ellis, Kaufman, Johnson, Parker, and Rockwall. Phase I of the Eight-Hour Ozone Implementation Rule gave nonattainment areas that had not obtained EPA approval for a 1-hour ozone attainment plan three options for SIP submittal. One option was to submit no later than June 15, 2005, an Eight-Hour Ozone Increment of Progress (IOP) plan demonstrating a 5 percent emissions reduction from the area's 2002 emissions baseline by June 15, 2007. This 5 percent reduction was to be over and above reductions from federal and state measures already approved by the EPA. The TCEQ chose and completed this option, which was submitted to the EPA on May 13, 2005. The EPA proposed approval of this SIP revision on Aug. 22, 2006.

From 2005 through 2007, the TCEQ conducted photochemical modeling, analyzed potential control strategies, and developed the DFW Eight-Hour Ozone Attainment Demonstration SIP, which was adopted by the commission on May 23, 2007. The DFW Reasonable Further Progress SIP revision and associated Texas Administration Code (TAC) Chapter 117 NO_X rules were adopted concurrently with the attainment demonstration SIP. The DFW attainment demonstration, reasonable further progress SIPs, and the rule revisions were all submitted to the EPA on time, by June 15, 2007.

The DFW attainment demonstration SIP revision submitted to the EPA demonstrates attainment of the 8-hour ozone standard by June 15, 2010, supported by photochemical modeling and a strong weight-of-evidence argument. The attainment demonstration SIP includes a commitment from the North Central

Texas Council of Governments to reduce NO_X emissions by 4.16 tons a day through a variety of local measures. Chapter 117 rule revisions incorporated into the DFW attainment demonstration SIP apply to major industrial, commercial, and institutional (ICI) sources, minor sources, electric generating facilities (EGFs), and cement kilns. One of those rules, known as the East Texas Combustion rule, applies to combustion sources only in specific counties in northeast Texas. The remaining Chapter 117 rules apply to sources in the entire nine-county DFW area and include EGFs, cement kilns, and some major and minor sources. The reasonable further progress SIP revision demonstrates a 15 percent total reduction in NO_X and VOC emissions between 2002 and 2008, as required under the EPA's Eight-Hour Ozone Implementation Rule.

The EPA is reviewing the DFW attainment demonstration SIP, the reasonable further progress SIP revision, and the Chapter 117 rule revisions. The TCEQ has been working with the EPA to provide any additional clarifying information needed. The EPA is expected to propose action this summer and take final action by Dec. 15, 2008.

Unlike the Houston-Galveston-Brazoria and Beaumont–Port Arthur areas, where industrialized point sources account for about half of the total NO_X, point source NO_X in the DFW area composes only about one-eighth of the total inventory. The majority of NO_X in the DFW area is emitted from on-road mobile sources (cars and trucks) and non-road mobile sources (construction equipment, aircraft, locomotives, etc.).

Beaumont–Port Arthur Area

The Beaumont–Port Arthur (BPA) area is classified as a "marginal" nonattainment area under the 1997 8-hour ozone standard. Counties included are Hardin, Jefferson, and Orange. Under the "marginal" nonattainment designation, the BPA area was given until June 15, 2007, to attain the standard or face reclassification to "moderate" nonattainment. The BPA area did not monitor attainment of the 1997 8-hour ozone standard by the June 15, 2007, deadline based on monitoring data from 2004–2006. As a result, the EPA reclassified the area to "moderate" nonattainment for 8-hour ozone, effective April 17, 2008. The new attainment date for the BPA area is June 15, 2010.

Though the area was reclassified, 8-hour ozone data for 2005, 2006, and 2007 indicate that BPA is monitoring attainment of the 1997 8-hour ozone standard. Therefore, a SIP revision that will contain a redesignation request and a maintenance plan is being developed for the BPA area. The deadline for submittal of the redesignation request and maintenance plan to the EPA is Jan. 1, 2009.

El Paso Area

A suite of control strategies have been implemented in the El Paso area to reduce carbon monoxide (CO), ozone, and coarse particulate matter (PM_{10}). These efforts have improved air quality in the El Paso area. There have been no monitoring violations of CO in El Paso since 2001. In February 2008 the TCEQ submitted to the EPA a request for redesignation to attainment and a maintenance plan for CO in the El Paso area. In April 2004, the El Paso area–which was previously nonattainment for the 1-hour ozone standard–was designated attainment for the 1997 8-hour ozone standard. The EPA's Phase I Implementation Rule for the 8-hour ozone standard directed that areas designated as nonattainment for the 1-hour ozone standard but designated attainment for the 8-hour ozone standard must submit a maintenance plan.

The TCEQ therefore adopted the El Paso area ozone maintenance plan on Jan. 11, 2006. The El Paso area continues to monitor attainment of the 1997 8-hour ozone standard. The El Paso area would be in attainment for PM_{10} if not for natural events, such as dust storms. The TCEQ developed a natural-events action plan (NEAP) to be able to flag exceedance days due to natural events in order to allow the EPA to discard these days when determining the area's compliance with the PM_{10} standard.

Transport SIP

Transport SIP revisions are required for a new or revised NAAQS within three years of the EPA promulgating

a new standard. Transport SIP revisions must contain adequate provisions to address interstate transport of air pollution, pursuant to Section 110(a)(2)(D)(i) of the FCAA. Revisions to the Texas SIP for ozone and $PM_{2.5}$ transport set forth how Texas meets FCAA requirements. Texas' current Transport SIP revision for the 1997 ozone and $PM_{2.5}$ NAAQS documents that any emissions from Texas sources that may have contributed to nonattainment in another state have been mitigated through existing ozone control strategies.

Regional Haze and Best Available Retrofit Technology (BART)

Texas proposed its initial Regional Haze SIP in December 2007. The purpose of this 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 have been 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 sources were required to perform individual modeling, which the TCEQ reviewed extensively. Ultimately, no sources were required to do additional BART controls due to reductions from EPA consent decrees, shutdowns, permit changes, and the Clean Air Interstate Rule (CAIR).

As of spring 2008, fewer than one-fourth of the states had submitted their Regional Haze SIPs to the EPA. The TCEQ anticipates adoption of this SIP in the summer of 2008. The deadline for federal Class I areas to achieve natural background levels for visibility is 2064. SIP revisions are required every five years until 2064.

Early Action Compacts

The San Antonio, Austin–Round Rock, and Northeast Texas (Tyler and Longview) areas addressed 8-hour ozone challenges through Early Action Compacts (EACs). At the completion of the EAC on Dec. 31, 2007, the Austin–Round Rock, Northeast Texas, and San Antonio areas were all monitoring attainment of the 1997 8-hour ozone standard. When the San Antonio area began implementation of its EAC, in 2004, the area was initially designated by the EPA as nonattainment for the 1997 8-hour ozone standard. The nonattainment designation was deferred until Dec. 31, 2007, as long as the San Antonio area continued to meet key milestones under the EAC. The Austin–Round Rock and Northeast Texas areas were designated attainment in 2004 by the EPA for the 1997 8-hour ozone standard. As a result of San Antonio's efforts, the EPA designated the San Antonio area as attainment for the 1997 8-hour ozone standard, effective April 15, 2008.

Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR)

In May 2005, the EPA finalized the Clean Air Interstate Rule (CAIR) to address the interstate transport of ozone and particulate matter. To address transport of these air pollutants, CAIR regulates emissions of sulfur dioxide (SO_2) and NO_X. In May 2005, the EPA also adopted the Clean Air Mercury Rule (CAMR) to regulate emissions of mercury. Both the CAIR and

CAMR impose limits, known as "budgets" or "caps," on emissions that occur within state borders.

Since the adoption of CAIR and CAMR by the commission, the EPA and the Texas Legislature have made subsequent changes on the implementation of both rules. The commission will consider proposing revisions to CAIR to reflect these changes on May 21, 2008. However, an opinion was issued on Feb. 8, 2008, by the United States Court of Appeals, District of Columbia Circuit, to vacate CAMR. Further direction will need to be provided by the EPA regarding the future implementation of CAMR. Litigation is also pending for CAIR.

Texas Emissions Reduction Plan (TERP)

The Texas Emissions Reduction Plan (TERP) was established in 2001 under Senate Bill 5, 77th Texas Legislature. Included in the TERP were the Diesel Emissions Reduction Incentive Grants Program and the New Technology Research and Development Program.

Diesel Emissions Reduction Incentive Grants Program

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

In 2003, the 78th Texas Legislature enacted House Bill 1365, which addressed revenue sources for the TERP, amended grant eligibility criteria, and authorized use of funding in all of the 41 counties making up the ozone nonattainment and near-nonattainment areas.

In 2005, the 79th Texas Legislature enacted HB 2481 and HB 3469. HB 2481 directed the agency to establish a process to issue at least a portion of the grants using a Rebate Grant approach. Under this approach, emission reductions and grant amounts would be predetermined for the types of projects included under the rebate program. An initial pilot rebate grant program was implemented in April 2006. HB 3469 established a new Clean School Bus Program to provide grants to school districts throughout the state to retrofit buses with systems that will reduce the emissions of particulate matter and other pollutants.

In 2007, the 80th Texas Legislature enacted SB 12 and HB 160. SB 12 made several changes to the program, including extending the program authorization until 2013 and increasing the maximum cost-effectiveness limits for projects funded under the TERP and other changes to make the program more effective. HB 160 added a new project category to allow funding for rail relocation and improvement projects at rail intersections in the nonattainment and near nonattainment areas. The Legislature also increased the appropriations to the TERP program by $64 million for the 2008–09 biennium and included funding for the Clean School Bus Program.

Through March 2008, a total of 3,431 projects had been funded, including pass-through grants awarded by the Railroad Commission of Texas, the Texas General Land Office, and the North Central Texas Council of Governments under third-party grant contracts from the TERP program. Over $545 million in grant funding has been awarded for replacements and upgrades to over 7,950 vehicles and pieces of equipment. These projects are expected to reduce NO_X emissions by more than 127,707 tons over the life of the projects. As of April 2008, applications were also being reviewed for projects to be awarded approximately $110 million in additional funding from the fiscal 2008 appropriations.

New Technology Research and Development Program

The New Technology Research and Development (NTRD) Program provides financial incentives to promote the development and commercialization of technologies that will support projects that may

be funded under the TERP ERIG program. Grants awarded under the NTRD program are to be directed toward a balanced mix of:

- Retrofit and add-on technologies and other advanced technologies that reduce emissions from the existing stock of engines and vehicles targeted by the TERP.
- The establishment of a testing facility to evaluate retrofits, add-ons, or advanced technologies and fuels–or combinations of these–to determine their effectiveness in producing emissions reductions, with emphasis on the reduction of oxides of nitrogen.
- Advanced technologies for new engines and vehicles that produce very low or zero NO_X emissions, including stationary and mobile fuel cells.

In 2005, the 79th Texas Legislature enacted HB 2481, which transferred the administration of the NTRD program, beginning Sept. 1, 2006, to the Texas Environmental Research Consortium (TERC), a nonprofit organization based in Houston, with the funding for the program to be provided through a contract with the TCEQ. The TCEQ executed a contract with TERC to administer the NTRD program. The contract provides TERC with $33.7 million in TERP funds to implement the NTRD program for the 2006–07 and 2008–09 biennia.

In 2007, the 80th Texas Legislature enacted SB 12, which authorized the use of NTRD grant funds for the establishment and operation of "a testing facility to evaluate retrofits, add-ons, advanced technologies and fuels, or combinations of retrofits, add-ons, advanced technologies and fuels, to determine their effectiveness in producing emissions reductions, with emphasis on the reduction of oxides of nitrogen." The TCEQ executed a contract with the University of Houston (UH) to expand and operate their diesel test facility. The contract provides UH with up to $11.9 million in TERP funds to expand their current diesel test facility and complete testing work with the new equipment. The TCEQ continues to monitor the commercialization and disposition activities on 63 NTRD grant projects that were awarded a total of $20.4 million before the NTRD program was transferred to TERC.

Air Toxics

The TCEQ's extensive air monitoring program provides information about the ambient levels of pollutants known as air toxics. To improve evaluation of these air toxics data, the TCEQ is currently updating health screening values for these pollutants based on the most current, reliable science available. Most monitors throughout the state do not measure levels of air toxics that are of concern. When the TCEQ does monitor pollutant concentrations of concern, the specific area and specific chemical are added to the Air Pollutant Watch List (APWL). There are currently 14 areas in 10 counties included on the APWL. The APWL is used to raise awareness and focus agency resources to reduce emissions of the specific chemicals of concern in those areas. Efforts in APWL areas have been successful. In 2007, an area in Texas City, in Galveston County, was removed from the APWL due to a consistent downward trend in benzene levels to a sustained concentration below a level of concern. The TCEQ will continue to use the APWL to reduce emissions of air toxics throughout the state.

The Clean School Bus Program

HB 3469, 79th Texas Legislature, 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.

In the 80th Texas Legislature, the General Appropriations Act provided $3.75 million per fiscal year over the 2008–09 biennium for implementation of the Texas Clean School Bus Program, established under Chapter 390, Texas Health and Safety Code. Additional funds for school buses have been acquired from the Texas Emissions Reduction Plan and federal grant programs.

As of April 2008, the Clean School Bus Program was issuing contracts to provide $5,872,266 in funding

to more than 54 school districts for upgrades that reduce emissions of harmful particulate matter (PM) from their school-bus fleets.

AirCheckTexas Drive a Clean Machine Program (formerly known as LIRAP)

In 2001, the 77th Legislature of the State of Texas, under HB 2134, passed legislation to assist low-income individuals with repairs, retrofits, or retirement of vehicles that fail emissions inspections in counties that have vehicle emissions testing requirements and have voluntarily chosen to participate. The TCEQ adopted requirements implementing the legislation in early 2002 establishing income eligibility requirements at 200 percent of the federal poverty level. Up to $600 in monetary assistance was provided for emissions-related repairs to bring the vehicle into compliance or $1,000 for replacement assistance of a vehicle that failed the required emissions test.

In 2007, the Legislature, through the adoption of SB 12, enacted program changes that enhanced opportunities for the retirement of older vehicles and replacement with new vehicles. Eligibility requirements for vehicles include: must be gasoline-powered and older than 10 years; must have been operated and registered in the implementing county for 12 months preceding the application; and must have passed the DPS safety or safety and emissions inspection within 15 months of application. Also, its owner must meet certain low-income criteria (up to 300 percent of federal poverty level).

Under the AirCheckTexas Drive a Clean Machine Program, an eligible applicant may receive $3,000 toward the purchase of a car, current model year or up to three model years old; $3,000 toward the purchase of a truck, current model year or up to two model years old; and $3,500 toward the purchase of a hybrid vehicle of the current or previous model year. 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; and have a total purchase cost that does not exceed $25,000. For the 2008–09 biennium, the Legislature appropriated 45 million dollars for each fiscal year to fund the program. The program is administered through grant contracts with participating counties.

Water Quality Issues

Total Maximum Daily Loads and Implementation Plans

The state's Total Maximum Daily Load (TMDL) Program works to improve water quality in impaired or threatened water bodies. The program is a major component in the state's strategy for managing the quality of water in Texas streams, lakes, bays, and other surface waters. For an overview of the TCEQ's approach to managing the quality of Texas waters, see *Preserving and Improving Water Quality,* published by the TCEQ in 2006 (GI-351).

When 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 its TMDL Program. In Texas, two agencies–the TCEQ and the State Soil and Water Conservation Board (TSSWCB)–have primary responsibility for developing TMDLs.

The TCEQ is the state's lead agency for preventing and abating nonpoint source pollution from all sources except agriculture and silviculture (forest management). The TCEQ is also authorized by the EPA to regulate point source discharges through permitting and enforcement programs via the Texas Pollutant Discharge Elimination System (TPDES). The TSSWCB is the lead agency for preventing and abating agricultural and silvicultural nonpoint source pollution.

Close coordination between the TCEQ and the TSSWCB on the development of TMDLs and their implementation is critical to the success of the state's efforts to improve the quality of the state's impaired surface waters. Consequently, the TCEQ and the TSSWCB have executed a Memorandum of Agreement that describes how the two agencies will cooperate in their mandated tasks to manage water quality.

In September 2006, the commission and the governing board of the TSSWCB formulated a task force of experts to review the methods used by the TCEQ to develop bacteria TMDLs. The Bacteria Task Force was composed of academic experts and interested stakeholders. In June 2007, the commission and the TSSWCB approved the task force's report and recommendations. This effort resulted in a clear path forward on how best to analyze these surface water quality impairments.

The commissioners, at the March 19, 2008, commission meeting, directed the TCEQ executive director and staff to form a stakeholder advisory group to advise the TCEQ on the best course of action for the water bodies classified as mercury-impaired on Texas' 303(d) List. Texas, like all states in the nation, is striving to deal with this complex water quality issue. Ultimately, the goal is to reduce mercury levels in Texas' waters.

Developing TMDLs

Before an effective plan of action can be developed, it is first necessary to determine the source(s) of a pollutant and the amount by which it must be reduced to attain standards. This is accomplished by developing a total maximum daily load–a budget for a pollutant. A TMDL:

- Determines the maximum amount (load) of a particular pollutant that a segment can receive each day and still both attain and maintain its water quality standards.
- Identifies the source(s) that contribute to the load of the pollutant.
- Allocates the allowable load, and the necessary reductions in it, to the source(s) in the watershed.

The term TMDL is also commonly used to refer to a report that the state must submit to the EPA for approval. This report includes the total maximum daily load that has been determined for a particular pollutant in the subject water body, and describes the data, analyses, and assumptions used in calculating the TMDL. The report also identifies the causes and sources of the pollutant in the watershed and estimates the load reductions necessary to restore the impaired use.

The complexity of developing TMDLs may vary from a simple analysis that sets limits for a small number of dischargers, to more elaborate ones that involve multiple dischargers, sophisticated computer models, extensive monitoring, and research. TMDLs are developed for varied types of water bodies, from small water bodies that few people use to large ones that residents use extensively. TMDLs must allow for seasonal variations, anticipate future growth, and include a margin of safety to account for uncertainties in the analysis.

The TCEQ places a strong emphasis on developing robust TMDLs that are legally and scientifically defensible. The TCEQ, the TSSWCB, the regulated community, and the public at large may have different thresholds for what they deem legally and scientifically defensible. To foster agreement about this issue, the TCEQ and the TSSWCB will continue, to the best of their abilities, to involve all interested people or organizations in developing and refining TMDLs.

The Making of an I-Plan

After developing a TMDL, the TCEQ works with stakeholders to formulate a plan to implement it–the Implementation Plan, or I-Plan. An I-Plan is a blueprint that describes how the pollutant reductions described in the TMDL will be achieved. It identifies the actions that will be taken to restore water quality conditions and establishes the means by which these actions will be tracked, evaluated, and reported. I-Plans are approved by the commission but are not subject to EPA approval.

Management activities included in I-Plans incorporate both non-regulatory and regulatory mechanisms, such as permit effluent limits and recommendations, management practices for nonpoint source pollution, monitoring to track changes in water quality, proposed revisions to stream standards, special projects, pollution prevention, public education, and watershed-specific rule recommendations.

The best strategies for each individual watershed are developed in cooperation with regional and local stakeholders. In the development of the I-Plan, the stakeholders

evaluate a wide range of strategies and weigh factors such as cost, technical feasibility, environmental effectiveness, commitment, and acceptability of various control actions. Although the activities in an I-Plan are not all mandated by law, the people and organizations responsible for pollution sources have an obligation to take the actions necessary to reduce pollution.

Even after I-Plans are fully implemented, it is difficult to predict accurately how long it will take for improvements to occur in the stream, or how much improvement will be seen. For this reason, I-Plans are subject to periodic revisions if tracking indicates a need to alter course. Through this adaptive management approach, the plan is reassessed and adjustments are made in the implementation activities as needed to attain water quality standards in the stream.

Time for Improvement

TMDLs may sound simple as described above, but the process of developing a TMDL and then implementing the necessary pollutant reductions may take several years. The time needed to complete a TMDL varies from one year to several years, depending on factors such as the complexity and extent of the impairment, the data available at the outset of the project, and the number of stakeholders involved in the process. Development of the I-Plan itself usually takes about one year.

Public Involvement

The TCEQ makes an extensive effort to identify the people who have a stake in restoring an impaired water body, and consults with them to develop TMDLs and I-Plans. The goals and methods of both TMDLs and I-Plans are reported and discussed in public forums such as basin steering committees or advisory groups formed specifically to work on a particular TMDL project.

The TCEQ's TMDL Program uses five primary avenues for statewide education: its Web site, the brochure *Clean Water for Texas* (GI-284), a biennial report on the status of TMDL implementation, e-mail news updates, and coordination with statewide forums such as the TMDL Participation Coordinating Committee (which is being formed by the TCEQ in 2008) and the stakeholder work groups of the Clean Rivers Program (CRP) and the Nonpoint Source Management Program.

Regionally, the TMDL Program coordinates its projects with the CRP Basin Steering Committees and with Soil and Water Conservation Districts if agriculture or silviculture are believed to contribute significantly to the pollutant load in the stream. For some TMDL projects, the existing CRP forum serves as the advisory group for the project; for other projects, a separate advisory group may be formed, or the state may conduct public meetings within the watershed at key points in the project development.

Environmental Progress through TMDL Implementation

As of August 2007, the Texas TMDL Program had restored water quality to attain standards for 21 impairments to surface waters. Overall, the TMDL Program restored fishing uses, conditions for aquatic life, and proper salinity to 278 stream miles; made water suitable as a source of drinking water for 3,943 reservoir acres; and restored conditions for aquatic life in 12 estuary square miles.

Table 9 shows the streams, reservoirs, and estuaries for which the TCEQ has approved implementation plans. For each plan, the table shows the basin and identification number of the impaired water body, the use that is affected, and the geographic extent of the impairment.

Strategic Development of the TMDL Program, Fiscal Years 2009–2013

The TCEQ will continue to develop and adopt TMDLs at a brisk pace. The agency expects to complete approximately 100 TMDLs during the next five-year period, and develop I-Plans to restore water quality.

Impairments to the contact recreation use from high bacteria concentrations are a significant percentage of the overall number of impairments to water quality in Texas. The TMDL Program is poised to initiate and complete many TMDLs for bacteria in the next five years, including some that have been on the state's 303(d) list since 2002. Due to recent advisory

Table 9. Environmental Progress through TMDL Implementation (through Aug. 31, 2007)

I-Plan	Basin & Segment(s)	Use Affected	Year Begun	Status	Area of Impairment
Aquilla Reservoir: Atrazine	Brazos River; 1253	Source for drinking water	2002	Goals met	3,943 lake acres
Arroyo Colorado: Legacy Pollutants and Organics	Nueces–Rio Grande Coastal; 2202 & 2202A	Safety of fish consumption	2001	Underway	504 stream miles; 333 lake acres
Clear Creek: Chlordane	San Jacinto–Brazos Coastal; 1101 & 1102	Safety of fish consumption	2001	Goals met	42 stream miles
Clear Creek: Dissolved Solids	San Jacinto–Brazos Coastal; 1102	General (not tied to a specific use)	2006	Underway	60 stream miles
Clear Creek: Volatile Organic Compounds	San Jacinto–Brazos Coastal; 1101 & 1102	Safety of fish consumption	2001	Goals met	84 stream miles
Dallas and Tarrant County Waterways: Legacy Pollutants	Trinity River; 0805, 0841, 0841A	Safety of fish consumption	2001	Underway	18,970 lake acres; 127 stream miles
E.V. Spence Reservoir: Total Dissolved Solids	Colorado River; Segment; 1411	General (not tied to a specific use)	2001	Underway	29,000 lake acres
Fort Worth Waterways: Legacy Pollutants	Trinity River; 0806, 0806A, 0806B, 0829, 0829A	Safety of fish consumption	2001	Underway, some goals met	101 lake acres; 47 stream miles
Houston Ship Channel: Nickel	San Jacinto River & Bays; 1001, 1005, 1006, 1007, 1013, 1014, 1016, 1017, 2426, 2427; 2428; 2429; 2430; 2430; 2436	Support of aquatic life	2001	Goals met	164 stream miles; 12 bay square miles
Lake Austin	Colorado River; 1403	Support of aquatic life	2001	Underway	1,830 lake acres
Lake Worth: PCBs	Trinity River; 0807	Safety of fish consumption	2006	Underway	3,560 lake acres
North Bosque River: Soluble Reactive Phosphorus	Brazos River; 1226 & 1255	General (not tied to a specific use)	2002	Underway	121 stream miles
Sabinal River: Nitrate and Nitrite	Nueces River; 2110	Source for drinking water	2006	Underway	27 stream miles

Visit the TCEQ's TMDL Program Web site for an overview and summary of TMDLs and I-Plans completed or in progress in Texas: <www.tceq.state.tx.us/goto/tmdl/complete>.

group input, bacterial source tracking technology may be a necessary component of these TMDLs.

Balancing TMDL Development, Implementation, and Funding

In the 2004–05 biennium, the TMDL Program spent an estimated 30 to 40 percent of its funding on implementation. In fiscal 2009, the program expects that 50 percent of the available funding will be spent on assisting implementation efforts. This percentage is expected to rise as TMDLs that were begun from 2004 through 2008 are completed and implemented. Increasing implementation means that unless resources can be redirected or additional funding can be secured, fewer TMDLs can be initiated in the coming years, as compared with the number developed during the first five years of the program (1998–2003). Balancing the priorities for developing new TMDLs and implementing the completed ones will be challenging.

303(d) List of Impaired Waters

The TCEQ, in keeping with its mission to protect the state's natural resources, monitors the condition of the state's surface waters, and assesses water quality. The *Texas Water Quality Inventory and 303(d) List*, a statewide report on the status of state waters, is prepared and submitted to the U.S. Environmental Protection Agency every two years. The TCEQ accepts public comment on the draft assessment and list. The report can also be found on the TCEQ Web site.

The 303(d) List is an important management tool produced as part of the assessment. It identifies water bodies that are impaired and not meeting the water quality standards. The 303(d) List is the first step in the restoration process, which is often followed by a Total Maximum Daily Load (TMDL). TMDLs specify pollutant load reductions needed to attain the water quality standard.

For 2008, the TCEQ prepared a focused assessment of all 374 classified water bodies plus those unclassified water bodies where there was pending regulatory need to initiate or revise planning activities, a TMDL, or a watershed protection plan. For this assessment, the TCEQ relied on cooperators–such as local, state, or federal agencies–and water program staff to contribute data and identify 53 water bodies in addition to the classified segments.

The water bodies assessed in 2008 were primarily classified segments, large and important resources, where water quality conditions are well understood from many years of monitoring. The total number of water bodies on the 2008 List is 386, a slight reduction from the recent 2006 List, demonstrating the TCEQ's progress in addressing water quality impairments. More than half of the impairments are for nonsupport of contact recreation use, caused by elevated bacteria. About a fourth of the impairments are due to low dissolved oxygen, resulting in unfavorable conditions for aquatic life.

Texas Surface Water Quality Standards

Setting Water Quality Goals

The Texas Surface Water Quality Standards (Title 30, Chapter 307, of the Texas Administrative Code) establish explicit water quality goals throughout the state. Water quality standards are adopted and implemented pursuant to Chapter 26 (Sections 023–026) of the Texas Water Code, and the U.S. EPA approves the standards in accordance with Section 303 of the U.S. Clean Water Act.

Regional hydrologic and geologic diversity is given consideration by dividing major river basins, bays, and estuaries into defined segments (referred to as classified or designated segments). Segment-specific standards identify appropriate uses for specific water bodies (aquatic life, contact or noncontact recreation, drinking water, etc.) and list upper and lower limits for common indicators (criteria) of water quality–such as dissolved oxygen, temperature, pH, dissolved minerals, and certain bacteria. Other standards–such as toxic criteria to protect aquatic life and human health–are applied statewide. Statewide standards may be revised on a site-specific basis when sufficient information is available.

Water quality standards are publicly revised periodically in order to incorporate new information on potential pollutants and additional data about water quality conditions in specific water bodies, and to address new state and federal regulatory requirements. The current standards were adopted in July 2000. The EPA has approved most of the revisions, but a few revisions are still pending approval.

Current Revisions: Progress and Issues

During fiscal 2008, the TCEQ, in coordination with a diverse advisory workgroup, developed substantive draft revisions to the Texas Water Quality Standards. The draft revisions address key water quality issues in Texas, and they are scheduled for public comment and consideration during fiscal 2009.

Over the past three years, the TCEQ has conducted or coordinated a large number of use-attainability analyses, which are studies that identify the appropriate uses and numerical criteria for individual water bodies. Use-attainability analyses provide site-specific tailoring of water quality standards, and these evaluations establish an important review of the water quality targets for identifying impaired water bodies, permitting wastewater discharges, and setting total maximum daily loads. Site-specific standards to be considered include:

- Revised uses and criteria for about 40 larger water bodies (classified segments).
- New aquatic-life use categories for about 40 small streams.
- Site-specific toxic criteria for 16 water bodies, based on studies that were funded by wastewater permittees.

Historically, almost all water bodies in Texas have been assigned standards for primary contact recreation. However, as the level of instream monitoring in Texas has increased, and as the development of total maximum total loads has progressed, it is clear that some water bodies are not physically appropriate for full contact recreation and cannot meet the assigned recreational criteria for bacteria even under relatively unaffected conditions. For the current standards revisions, the TCEQ is developing options for a broader spectrum of recreational use categories and associated bacteria criteria, as well as defining a regulatory framework to appropriately apply these criteria to various types of water bodies. In addition, the TCEQ is establishing detailed protocols to facilitate recreational use-attainability analyses of individual water bodies.

The TCEQ has several approaches to address nutrient loadings that could cause excessive growth of aquatic vegetation:

- Narrative water quality standard.
- Watershed rules that specify limits for total phosphorus limits in selected, sensitive watersheds.
- Site-specific evaluation of wastewater discharge permits.
- Total maximum daily load allocations for phosphorus.

Numerical water quality criteria are needed for some situations, however, in order to provide a quantified target to assess the impacts of phosphorus and nitrogen in sensitive water bodies. The U.S. EPA is also requiring numerical nutrient criteria in all state water quality standards. The TCEQ has established a plan for the long-term development of nutrient criteria that has been agreed to by the EPA. As a first major step, the TCEQ convened a nutrient advisory workgroup to develop numerical criteria that address nutrients in approximately 100 major reservoirs, and these criteria will be considered during the current water quality standards revisions.

The Texas water quality standards include criteria for numerous toxic pollutants in order to protect drinking water sources, protect for human fish consumption, and protect aquatic life. There is substantial new data now available that can improve numerical criteria for toxic pollutants. The TCEQ is incorporating this new information to consider the following revisions to the water quality standards:

- Updated calculations for toxic criteria to protect human health, by including better estimates of the amount of fish that people eat, and by considering child exposure.
- Evaluation of new EPA mercury criteria for fish tissue.

- Addition of new human-health criteria for 23 toxicants and new aquatic-life criteria for two toxicants.
- Revise numerous human-health and aquatic-life toxic criteria.

In conjunction with the standards revisions, the TCEQ also revises the associated wastewater permitting procedures, entitled "Procedures to Implement the Texas Surface Water Quality Standards." One component of these procedures describes the requirements for whole-effluent toxicity (WET) testing for major wastewater discharges. WET testing assesses the cumulative toxic effect that a wastewater discharge may have on the aquatic organisms in the receiving waters, by exposing selected aquatic species (a small fish and a small crustacean) to the effluent. If lethal effects are noted, a permittee is required to conduct a toxicity reduction evaluation, and eventually a chemical specific effluent limit or an enforceable lethal WET limit could be added to the permit, if required. The EPA is now requiring two major changes for wastewater discharge permits that are issued by federally delegated states such as Texas:

- Imposing enforceable WET limits in discharge permits if previous WET testing by the facility shows any "reasonable potential" for toxicity.
- Requiring all components of WET to address more subtle sublethal effects on growth and reproduction, in addition to lethal effects.

The TCEQ will continue to coordinate with the water quality standards advisory workgroup and with other stakeholders in order to publicly consider appropriate options for WET testing.

Future Initiatives

Beyond the current revisions of the water quality standards, the TCEQ will continue to work to improve the scientific and regulatory framework for the state water quality program. Long-term efforts for water-quality standards development include the following:

- Coordinate closely with EPA Region 6 to streamline EPA approval of water quality standards.
- Maximize studies to assign site-specific standards for recreational uses and for aquatic life.
- Develop nutrient criteria to consider for selected streams and estuaries in Texas.
- Evaluate new indicator criteria for recreation, now under development by the EPA and others that correlate better with risk to swimmers.
- Coordinate with other states to improve the water quality regulation of shared waters, in cooperation with the Gulf of Mexico Alliance and with the states in EPA Region 6.

Continuous Water Quality Monitoring Network (CWQMN)

In 2001, the TCEQ began developing automated remote water quality monitoring systems to continuously monitor basic field water quality parameters. These early systems consisted of water quality monitoring instruments, data loggers, communication systems, and the MeteoStar/LEADS database, which ingests and displays the data in near real-time. Prior to development of these systems, all TCEQ water quality field data were collected in the field by monitoring staff using multiparameter instruments.

These early systems were designed to demonstrate and document the technical feasibility of continuous water quality monitoring. The TCEQ confirmed that basic water quality parameters such as temperature, pH, dissolved oxygen, specific conductance, turbidity, and flow can be collected at high frequencies using remote monitoring systems. Typically, these parameters are collected every 15 minutes. At select sites, certain nutrients are also monitored several times per day using automated chemistry labs. The dense temporal field and nutrient datasets collected by these systems can answer questions that cannot be answered by samples collected quarterly as part of the routine water quality monitoring program.

More recently, systems have been designed and deployed to meet site-specific data needs. The data needs may include development of Texas Surface Water Quality Standards; evaluation and reporting of water quality required by the Clean Water Act, Sections 305(b) and 303(d); documenting the progress of Total Maximum Daily Load Implementation Plans; nonpoint source implementation strategies; documenting

water quality trends; guiding water quality and water quantity decision making; prioritizing field investigations and special studies; and providing water quality data to local entities and the public.

The TCEQ is also working with other entities to automate water quantity management decisions based on continuous water quality monitoring data at select sites. One of these initiatives focuses on excluding first-flush storm water from major recharge features in the Edwards Aquifer. Other focus points include managing the quality of irrigation water in the Lower Rio Grande and managing the high salt loads to drinking water supplies in arid parts of the state.

The TCEQ continues to evaluate new continuous water quality monitoring instruments and technologies. These instruments include rugged submersible nutrient analyzers, multiple depth water quality profilers, and new multiparameter sondes designed for long-term deployment.

The TCEQ's Continuous Water Quality Monitoring Network (CWQMN) currently includes more than fifty monitoring stations distributed across the state. The TCEQ has a goal of expanding the CWQMN by 10 sites per fiscal year. To date, the CWQMN has been developed without dedicated staff or funding. Staff resources have been drawn from the Monitoring Operations Division, Field Operations Division, cooperators, and contractors. Funds have come from LAR Capital and federal grants. The TCEQ maintains a prioritized list of proposed CWQMN sites for deployment as staffing and capital resources allow. The CWQMN is rapidly approaching the maximum extent to which the network can expand due to resource limitations.

Waste Issues

Low-Level Radioactive Waste

The passage of HB 1567 by the 78th Legislature provided for a public entity to be licensed for a low-level radioactive waste disposal site in Texas and established procedures for the TCEQ to accept and evaluate license applications. The bill allows a disposal facility to accept waste from members of a 1998 waste disposal compact–Texas, Vermont, and Maine (Maine officially withdrew in 2004)–or waste that has been approved for importation to this state by the Texas Low-Level Radioactive Waste Disposal Compact Commission.

In addition, the bill allows a facility to accept waste from federal facilities at a separate and adjacent facility under one TCEQ license. Another provision of the bill allows a disposal facility to be licensed and permitted to accept mixed waste–that is, waste containing both low-level radioactive and hazardous constituents.

The agency adopted rules and has implemented procedural requirements for license application submission, review, and selection. The TCEQ received an application from Waste Control Specialists, LLC, for a license to authorize near-surface disposal of low-level radioactive waste.

The TCEQ has conducted an administrative review and a merit review based on statutory tiered criteria, and is currently completing the technical review of the license application. The applicant requested an extension to the technical review to address deficiencies. which was conditionally granted by the executive director. Following the completion of the technical review, there will be opportunity for a contested case hearing on a draft license; the hearing would be statutorily limited to last one year. If contested, the license issuance would come before the TCEQ commissioners for a final decision.

By-product Material and Uranium Mining

By-product material is typically produced by uranium mining or other uranium process residues. By-product material can also come from the processing of thorium. By definition, by-product material are tailings or wastes produced by or resulting from the extraction or concentration of uranium or thorium from ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes.

During the 80th Texas Legislature, two bills affecting by-product material and in situ uranium mining were passed. SB 1604 transferred certain regulatory

responsibilities for by-product materials and uranium mining from the Texas Department of State Health Services (DSHS) to the TCEQ. The TCEQ now regulates by-product material processing, storage, and disposal and specifically regulates the surface and subsurface of uranium mining operations. In addition, SB 1604 addressed the TCEQ's Underground Injection Control (UIC) Program for regulation of wells associated with in situ uranium mining and required the TCEQ to establish and administer a new state fee for the disposal of radioactive wastes.

Prior to SB 1604, the DSHS had responsibility for the regulation and oversight of commercial radioactive waste processing and storage, source material recovery (uranium mining licensing), and by-product material disposal, while the TCEQ regulated all other radioactive waste disposal. Many of the licensing actions inherited by the TCEQ from the DSHS were pending in-house for many years. The TCEQ is now in the process of evaluating the applications and developing a strategy and timeline for the review of these applications and for the completion of these licensing actions according to the statutory priority provided in SB 1604.

SB 1604 specifically addressed the process for the TCEQ's continued review of a pending application submitted by Waste Control Specialists to the DSHS for a by-product material disposal facility proposed for Andrews County. A statutory deadline of Oct. 1, 2007, was given for completion of the technical review. The technical review was completed on Oct. 1, 2007 and the necessary documentation for the completion of the technical review, the executive director's recommendation for license issuance, a draft license, and a draft Environmental Analysis were filed on Oct. 22, 2007. The license was issued by the commission on May 29, 2008.

In addition to the regulation of by-product material processing, storage, and disposal, the TCEQ also regulates the permitting of wells for in situ uranium mining. Through the UIC Program, Class III wells are permitted for the in situ recovery of uranium. UIC permits are issued for a specific area in which the permit holder is authorized to drill and operate multiple Class III wells. These wells include injection and production wells used for the recovery of the uranium as well as monitoring wells. In addition to an area permit, an operator obtains a Production Area Authorization (PAA) to inject into a specific production area.

A second bill of the 80th Texas Legislature, HB 3838, amended the Natural Resource Code to require companies to register with the TCEQ all wells used to develop a Class III well application, and to share information from those wells with the local groundwater conservation district, if one exists. In addition, TCEQ commissioners have directed the executive director to review and update, as necessary, all rules related to uranium mining. Rules to address SB 1604, HB 3838, and the directive of the commissioners are currently being developed.

Recently, there has been a resurgence of the uranium industry as the price of uranium has increased, reaching a high of $138 a pound in 2007. The resurgence has resulted in a significant increase in the number of new permit applications.

Both the public and industry have expressed concerns regarding the permitting and licensing of in situ uranium mining. The public has expressed concern over the potential for groundwater contamination. Industry has expressed concern with the time needed to obtain the authorizations necessary to conduct in situ recovery of uranium.

Rule Revisions to Chapters 305 and 330 of 30 TAC

On May 7, 2008, the commission adopted revisions to chapters 305 (Consolidated Permits) and 330 (Municipal Solid Waste, MSW) of Title 30 of the Texas Administrative Code (TAC). Under the former process, the time and effort required for a major MSW permit amendment was almost identical to that for a new permit. The revisions streamline the process for certain major amendments, and allow submittal of a limited application for certain substantive changes to an MSW permit. These applications, as well as review of the applications and any subsequent hearing, are limited to the requested change and related issues. To increase

public awareness, the new rules require the posting of signs for new permits and major amendments, and increase the distance requirement for providing mailed notice to landowners, when a new MSW facility or a change to an existing MSW facility is being proposed.

Used Electronics (E-Waste)

For several years, under general statutory mandates to promote reuse and recycling, the TCEQ has facilitated the reuse and recycling of used electronics through outreach and online recycler-locator services. HB 2714, passed by the 80th Legislature, 2007, requires the TCEQ to help implement a computer-equipment recycling program based on individual manufacturer responsibility and shared responsibility among consumers, retailers, and Texas state government. The commission adopted rules to implement the program on May 21, 2008.

Under this legislation, a manufacturer that sells computer equipment in or into Texas for personal or home business use must:

- Provide to consumers, by Sept. 1, 2008, free collection and recycling options for computer equipment that has been used primarily for personal or home-business purposes and is the manufacturer's own brand or brands.
- Label the computer equipment with its brand(s).
- Submit a recovery plan to the TCEQ for the manufacturer's compliant collection program.
- Submit an annual report to the TCEQ for this program, which includes:
  - the weight of computer equipment collected, recycled, and reused during the preceding calendar year, and
  - documentation verifying that the computer equipment that was collected has been recycled or reused in accordance with certain standards and federal, state, and local laws.

Also, starting Sept. 1, 2008, retailers cannot sell computer equipment in or into Texas unless the equipment is labeled with a brand and the brand's manufacturer is on the TCEQ's online list.

The TCEQ will:

- Educate consumers on computer equipment reuse and recycling.
- Provide online links to manufacturers and details on their programs.
- Monitor the program within the TCEQ.
- Report to the Legislature annually on information compiled from manufacturer' annual reports.

Other Key Issues

During the next five years, the TCEQ must address other challenges as it proceeds to fulfill its goals.

Permit Streamlining Efforts

Since the inception of the permit time frame reduction (PTR) project in March 2002, the TCEQ has significantly reduced its permitting backlogs and reduced permit time frames. Most notably, since March 2002, we have reduced the overall permitting backlog from 1150 permits to less than 300. Some of the streamlining measures behind this success include:

- Increased the use of general permits, standard permits, and permits by rule. The continued use of these authorizations has significantly reduced the permit processing time frames by as much as 300 days in certain instances.
- Implementation of legislation from the 80th Legislature allows the TCEQ to combine air permit amendments with renewal applications. This change allows applicants to apply for renewals up to three years prior to the expiration of their permit, thereby reducing the permit processing time frame for the TCEQ, and eliminating additional permitting requirements for applicants.
- Continued development of electronic permitting options for applicants. Phase I of the e-permitting system for Storm Water General Permits went on-line in February 2008. Phase II of the e-permitting initiative will focus on additional high-volume authorizations and is expected to come on-line in the spring of 2008. With the new e-permitting system, applicants can apply

for a permit online and receive coverage within a matter of minutes.

- Development of an electronic payment system in coordination with Texas Online enables agency customers to pay any invoiced fees and most permit application fees online.
- Establishment of time frames for every major type of application processed by the agency.

The TCEQ continues to strive to identify and develop new and innovative ways to further streamline the permitting process while continuing to focus on issuing well-written permits that are protective of human health and the environment. The agency will continue to build on the successes gained from the PTR initiative with the implementation of the Project Time Frame Tracking (PTT) initiative. The PTT initiative will not only focus on permitting time frames, but will also encompass other authorizations such as Water District Regular Bond Applications, Water District Expedited Escrow Releases, Water District Surplus Fund Requests, Water Districts Expedited Creation Requests, Water System Engineering Plan Reviews, Water System Plan Exceptions, Water System Alternative Capacity Requests, Superfund Cleanups, Dry Cleaner Remediations, Petroleum Storage Tank Remediations, and Voluntary Cleanup Requests.

The TCEQ is also actively involved with the Governor's Competitiveness Council (GCC). The goal of the GCC is to identify and develop additional regulatory streamlining measures needed to keep Texas competitive in a global economy.

TCEQ staff is currently working with GCC contractors to identify these streamlining measures and will assist in the development of legislative recommendations if needed.

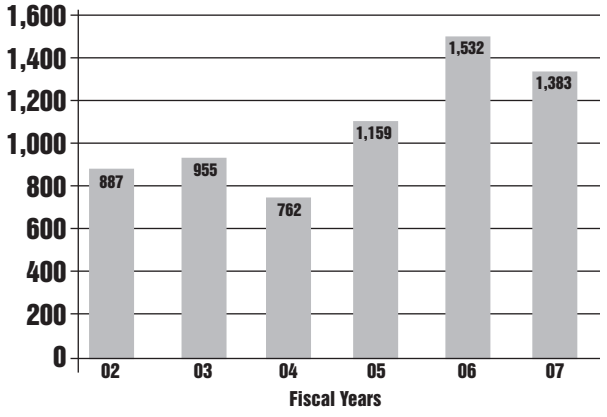
Enforcement Initiatives

In fiscal 2007, the TCEQ issued 1,383 administrative orders, which is the second highest number of orders issued since the agency received administrative penalty authority (see Figure 6). The increase in the number of orders issued was the direct result of process improvements implemented in response to an in-depth examination of the TCEQ's enforcement functions. The streamlining of the enforcement process has shortened case resolution time frames by approximately 20 percent.

In addition, the TCEQ has continued to make other processing improvements for enforcement orders. Some of the major changes are:

- Increased efficiency by reducing the number of management reviews for proposed enforcement actions and by establishing standardized language to minimize errors.
- Reduced the backlog of old cases and prioritized large recycling/mulch cases.
- Developed a "draft" compliance history rulemaking package for commission consideration.
- Developed procedures to implement changes approved by the commission, to:
  - Allow demonstrated good faith adjustments on violations where the respondent was deemed culpable.
  - Allow demonstrated good faith penalty adjustments when the respondent has not achieved complete compliance prior to settlement.
  - Prohibit the recovery of economic benefits from political subdivisions and nonprofit organizations.
  - Allow staff to make an updated assessment of a respondent's financial ability to pay penalties upon request by the commission.
  - Retain the limit of 36 months for payment plans, but allow Executive Director discretion to adjust as appropriate.

Figure 6. Total Number of Administrative Orders Issued, by Fiscal Year



Part IV

Strategic Planning Structure

**Goals, Objectives, and Strategies,
Fiscal Years 2010-2011**

Goals, Objectives, and Strategies, Fiscal Years 2010–2011

The performance measures and definitions had not received formal approval from the Legislative Budget Board or the Governor's Office of Budget, Planning, and Policy at the time of this printing.

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 and disposed of in Texas by 52 percent by the 2011 Toxic Release Inventory (TRI) reporting year from the 1992 reporting year levels 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 nonattainment areas

01-01.02 Nitrogen oxides ($N0_x$) 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 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 TERP grants derived from New Technology Research and Development (NTRD) technologies

01-01.10 Percent of high and significant hazard dams inspected within established time frames

01-01.11 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

01-01-01.08 Number of New Technology grants approved to fund technologies to be submitted for verification or certification by the EPA or CARB

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 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 Percentage of surface water impairments that are addressed within 13 years of impairment listing

01-01-02.03 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 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 government regions in the state with 10 or more years of disposal capacity

Goal 01, Objective 02

To review and process 90% 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 nonhazardous waste permit applications reviewed
01-02-03.03 Number of hazardous waste permit applications reviewed

Explanatory Measures
01-02-03.01 Number of nonhazardous 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 processed
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.

Outcome Measures
01-03.01 Percent of scheduled licensing activities complete

01-03-01. Low-Level Radioactive Waste Management
Ensure the proper and safe recovery of source material and disposal of low-level radioactive waste.

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% 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 that meet drinking water standards

02-01.02 Percent of Texas public water systems protected by a source water protection program

02-01.03 Percent of Texas population served by public water systems protected by a program that 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 that 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 year 2011, 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 timely and 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

03-01.08 Tons of emissions and waste reduced and minimized as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs

03-01.09 Amount of financial savings achieved as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs

03-01.10 Tons of emissions and waste reduced and minimized in the Texas-Mexico border region as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs

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 livestock and poultry operation sites
03-01-01.05 Number of inspections and investigations of waste sites
03-01-01.06 Number of spill cleanup inspections/ investigations

Efficiency Measures

03-01-01.01 Average inspection and investigation cost of livestock and poultry operations
03-01-01.02 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

03-01-02. 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 on-site technical assistance visits, presentations, and workshops conducted on pollution prevention/waste minimization and voluntary program participation
03-01-03.02 Number of entities participating in voluntary programs
03-01-03.03 Number of quarts of used oil diverted from landfills and processed

Efficiency Measures

03-01-03.01 Average cost per on-site technical assistance visit

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 collection and cleanup events
03-01-03.03 Tons of agricultural waste chemicals collected by TCEQ-sponsored entities
03-01-03.04 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 year 2011, identify, assess, and remediate up to 56 percent of the known superfund sites and/or other sites contaminated by hazardous materials. To identify, assess and remediate up to 91% 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 Percent of Superfund sites cleaned up
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. Provide prompt and appropriate reimbursement to contractors and owners for the cost of remediating 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 reimbursement fund applications processed
04-01-01.04 Number of petroleum storage tank cleanups completed

Efficiency Measures

04-01-01.01 Average time (days) to review and respond to remedial action plans
04-01-01.02 Average time (days) to review and respond to risk-based site assessments
04-01-01.03 Average time (days) to process Petroleum Storage Tank Remediation Fund reimbursement claims

Explanatory Measures

04-01-01.01 Average cost per petroleum storage tank cleanup

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 that threaten human health and 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 cleanups 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 federal Superfund sites

04-01-02.03 Number of state Superfund sites

04-01-02.04 Number of Dry Cleaner Remediation (DCRP) eligible sites

Goal 05. Texas River Compacts

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

Agency Technology Initiatives

Technology Initiative Alignment

Technology Initiative Alignment

The Technology Initiative 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 10. Agency Technology Initiatives and Agency Objectives

Regulated Entity Identification

Definition	The unique identification of the entities (e.g., facilities, licensed operators) that the TCEQ regulates.
Related Agency Objective	01-01, 01-02, 02-01, 03-01, 04-01
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current
Anticipated Benefits	Provide regulated entities with a single point of service for permitting and compliance activities. Assess environmental impacts and control strategies by industry. Assess compliance history during permit evaluations.
Innovation/Best Practice/Benchmarking	*Best practice:* All state and federal environmental agencies have had to face the same need to integrate data across regulatory programs and media of pollution.

Environmental Conditions

Definition	The integration of ambient environmental data to provide an understanding of environmental conditions on a geographic basis.
Related Agency Objective	01-01, 01-02, 02-01, 03-01, 04-01
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
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.
Innovation/Best Practice/Benchmarking	*Best practice:* Well-designed maps are readily understood by non-specialists. This makes them useful in communicating complex information to state leaders and to the public.

Compliance and Enforcement Activity

Definition	The compilation and standardization of compliance and enforcement activity tracking, to enhance planning and tracking capabilities for compliance and enforcement functions.
Related Agency Objective	03-01
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current
Anticipated Benefits	Improve agency resource allocation for compliance and enforcement activities, to maximize the environmental benefit.
Innovation/Best Practice/Benchmarking	

Regulated Entity Activity and Release Characterization

Definition	The compilation of selected information about regulated entities' regulated activities and pollutant releases, to enable a multimedia profile of regulated entities.
Related Agency Objective	01-01, 01-02, 02-01, 03-01
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
Anticipated Benefits	Plan pollution reduction and environmental improvement measures. Assess opportunities for pollution reduction and materials reuse by industry. Minimize costs to industry of environmental regulations.
Innovation/Best Practice/Benchmarking	

Permit Development and Management

Definition	The development of enhanced information support for the tracking of permit development time frames, milestones, and activities, and the sharing of selected permit obligations for regulated entities.
Related Agency Objective	01-02, 03-01
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Planned
Anticipated Benefits	Reduce permit processing times, to improve environmental compliance at reduced cost to industry. Improve public access to information concerning permit applications and permit provisions.
Innovation/Best Practice/Benchmarking	

Spatial Data Management

Definition	The integration of spatial data components with agency administrative and environmental data systems by acquiring all spatial datasets required by program areas to accomplish the agency mission, complying with established agency standards for environmental information management that incorporate the spatial or locational component for standards-compliant agency spatial datasets, maintaining spatial data in an accessible manner for use by all agency personnel, and providing standard tools, resources, training, and organizational support necessary to use spatial data.
Related Agency Objective	01-01, 01-02, 02-01, 03-01, 04-01
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
Anticipated Benefits	Reduce cost and improve responsiveness of data systems with spatial components. Increase data sharing with other organizations and the public. Increase data integration to improve environmental decision-making and increase the value of agency data to the state.
Innovation/Best Practice/Benchmarking	*Best practice:* Careful design of spatial data standards, and adherence to the standards across programs, improves the usability of datasets and reduces overall costs by obviating redundant data-gathering.

Access to Data and Services

Definition	*Electronic Government:* The development of systems and processes that allow the public, regulated entities, and other interested parties to interact with the agency via the Internet. *Records Management:* The investigation of tools, techniques, and procedures to manage electronic records, maintain and index existing paper records, convert existing sources of paper to electronic records, and make electronic records available to agency staff and the public via the Internet. *Reporting:* The development of efficient systems for data searching, reporting, and mining to increase the availability and the value of agency data.
Related Agency Objective	All
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
Anticipated Benefits	Reduce the cost and delay of interactions between the agency and other parties. Increase the availability and value of agency data. Reduce the cost of maintaining and accessing agency records, and mitigate risks to their long-term maintenance.
Innovation/Best Practice/Benchmarking	

Data Exchange and Standards

Definition	Participate with the EPA and other entities to define data exchange standards under the auspices of the National Environmental Information Exchange Network (NEIEN). Implement the data exchange network, and exchange data with the EPA and other entities.
Related Agency Objective	All
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
Anticipated Benefits	Reduce cost and improve quality of data exchanges with federal, state, and local entities. Improve environmental regulation through improved coordination and reduced costs.
Innovation/Best Practice/Benchmarking	*Innovation:* The use of Web services protocols and markup standards to enable data exchange.

Technical Architecture Planning

Definition	The development of agency processes and governance structures to guide the evolution of technology to meet changing agency needs and take advantage of technical advances.
Related Agency Objective	All
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
Anticipated Benefits	Reduce risks of service interruptions or reduced service levels from technical obsolescence and changes to agency configurations. Reduce risk of unplanned costs to maintain and improve data systems. Improve agility of agency development teams in meeting new requirements. Reduce support costs by simplifying and integrating system configurations.
Innovation/Best Practice/Benchmarking	

Information Security

Definition	The continued investment in tools and planning to ensure that information is secure.
Related Agency Objective	All
Related Agency Strategy	All strategies under the listed objectives are supported.
Status	Current and Planned
Anticipated Benefits	Mitigate risk from increasing information security threats. Comply with new state and federal information protection regulations.
Innovation/Best Practice/Benchmarking	

Appendixes

APPENDIX A

Agency Planning Process

In accordance with the TCEQ's mission, the agency has established five goals and seven quantifiable objectives to accomplish through its Strategic Plan, Fiscal Years 2009B2013. These goals and objectives reflect the priorities and the environmental improvements that the agency expects to make within this time frame.

No changes are anticipated in the 2010–11 biennium for the goals that were used in the 2008–09 biennium. Beginning with the 2010–11 biennium, the five goals for the TCEQ are:

1. Assessment, planning, and permitting
2. Drinking water and water utilities
3. Enforcement and compliance assistance
4. Pollution cleanup
5. Texas River Compacts

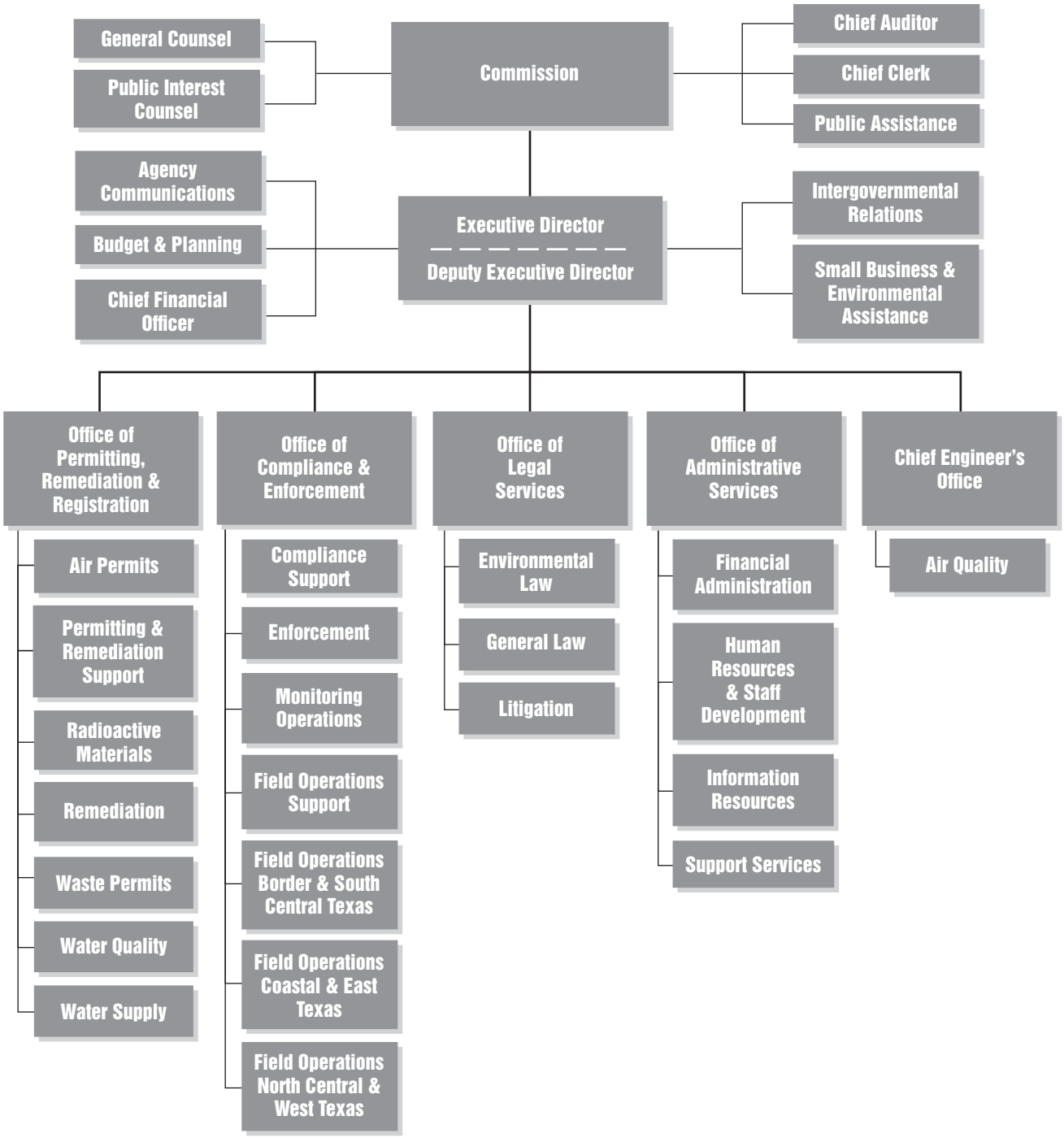
To achieve the mission and goals of the agency, the TCEQ has adopted seven planning objectives to protect the health and human welfare of our citizens, and to promote clean industrial and business development in Texas. The seven planning objectives are:

1. To decrease the amount of toxic chemicals released into the environment and disposed of in Texas by 52 percent by the 2011 Toxic Release Inventory (TRI) reporting year from the 1992 reporting year levels and reduce air, water, and waste pollutants through assessing the environment.
2. To review and process 90 percent of air, water, and waste authorization applications within 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 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 2011, 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 2011, identify, assess and remediate up to 56 percent of the known Superfund sites and/or other sites contaminated by hazardous materials. To identify, assess, and remediate up to 91 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.

The Strategic Plan is developed with the support of the TCEQ commissioners and executive management to ensure that agency policies address appropriate environmental protection and provide a cost-effective process to meet agency goals and objectives. Each agency office provides input into the external and internal assessment that is used to develop and maintain the goals, objectives, and strategies contained in this plan. Additionally, by improving and reporting on agency performance measures as accurately as possible, the TCEQ Strategic Plan is designed to communicate agency progress on efforts to ensure that all Texans are living in a safe environment.

A P P E N D I X B

TCEQ Organizational Chart



A P P E N D I X C

Outcome Projections, Fiscal Years 2009–2013

Goal/Obj.	Outcome Measures	2009	2010	2011	2012	2013
01-01.01	Annual percent of stationary and mobile source pollution reductions in nonattainment areas	6%	6%	6%	6%	6%
01-01.02	Nitrogen oxides (NO_X) emissions reduced through the Texas Emissions Reduction Plan (TERP)	86.4 tpd	64.8 tpd	70.8 tpd	78.5 tpd	84.5 tpd
01-01.03	Percent of Texans living where the air meets federal Air Quality Standards	53%	37%	37%	37%	37%
01-01.04	Annual percent reduction in pollution from permitted wastewater facilities discharging to the waters of the state	0.1%	0.1%	0.1%	0.1%	0.1%
01-01.05	Percent of Texas surface waters meeting or exceeding water quality standards	67%	67%	67%	67%	67%
01-01.06	Annual percent of solid waste diverted	7%	7%	7%	7%	7%
01-01.07	Annual percent decrease in the toxic releases in Texas	2%	2%	2%	2%	2%
01-01.08	Annual percent decrease in the amount of municipal sold waste going into landfills	-2%	-2%	-2%	-2%	-2%
01-01.09	Percent of TERP grants derived from New Technology Research and Development (NTRD) technologies	15%	15%	15%	15%	15%
01-01.10	Percent of high and significant hazard dams inspected within established time frames	70%	70%	70%	70%	70%
01-01.11	Number of acres of habitat created, restored, and protected through implementation of estuary action plans	2,000	2,000	2,000	2,000	2,000
01-02.01	Percent of air quality permit applications reviewed within established time frames	90%	90%	90%	90%	90%
01-02.02	Percent of water quality permit applications reviewed within established time frames	90%	90%	90%	90%	90%
01-02.03	Percent of water rights permit applications reviewed within established time frames	86%	86%	86%	86%	86%
01-02.04	Percent of waste management permit applications reviewed within established time frames	90%	90%	90%	90%	90%
01-03.01	Percent of scheduled licensing activities completed	90%	95%	100%	100%	100%
02-01.01	Percentage of Texas population served by public water systems that meet drinking water standards	90%	91%	93%	91%	90%
02-01.02	Percent of Texas public water systems protected by a source water protection program	95%	95%	95%	95%	95%
02-01.03	Percent of Texas population served by public water systems protected by a program that prevents connection between potable and non-potable water sources	95%	95%	95%	95%	95%

continued on next page

Outcome Projections, Fiscal Years 2009–2013 (continued)

Goal/Obj.	Outcome Measures	2009	2010	2011	2012	2013
03-01.01	Percent of inspected or investigated air sites in compliance	98%	98%	98%	98%	98%
03-01.02	Percent of inspected or investigated water sites and facilities in compliance	97%	97%	97%	97%	97%
03-01.03	Percent of inspected or investigated waste sites in compliance	97%	97%	97%	97%	97%
03-01.04	Percent of identified noncompliant sites and facilities for which timely and appropriate enforcement action is taken	85%	85%	85%	85%	85%
03-01.05	Percent of investigated occupational licensees in compliance	82%	82%	82%	82%	82%
03-01.06	Percent of administrative orders settled	85%	85%	85%	85%	85%
03-01.07	Percent of administrative penalties collected	88%	88%	88%	88%	88%
03-01.08	Tons of emissions and waste reduced and minimized as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs	100,000	100,000	100,000	100,000	100,000
03-01.09	Amount of financial savings achieved as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs	$30,000,000	$30,000,000	$30,000,000	$30,000,000	$30,000,000
03-01.10	Tons of emissions and waste reduced and minimized in the Texas-Mexico border region as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs	1,000	1,000	1,000	1,000	1,000
04-01.01	Percent of leaking petroleum storage tank sites cleaned up	90%	86%	85%	84%	83%
04-01.02	Percent of Superfund sites cleaned up	62%	63%	63%	64%	65%
04-01.03	Percent of voluntary and brownfield cleanup properties made available for commercial/industrial redevelopment, community, or other economic reuse	66%	67%	67%	67%	68%
04.01.04	Percent of industrial solid and municipal hazardous waste facilities cleaned up	57%	57%	57%	57%	57%
05-01.01	The percentage received of Texas' equitable share of quality water annually as apportioned by the Canadian River Compact	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	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	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	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	100%	100%	100%	100%	100%

TCEQ Performance Measures and Definitions, Fiscal 2009

At the time of this printing, these 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:

1. **Outcome Measures.** Used to assess the effectiveness of 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.** 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.** 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:

1. **Short Definition.** Provides a brief explanation of the measure, with enough detail to give a general understanding of the measure.
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 higher, near, or lower than projections.

The following is a listing of the TCEQ's performance measures and their definitions for fiscal 2009.

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 that 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 diesel 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 and is expressed as tons per day reductions.

Data Limitations: None identified; grant recipients are required to report emissions reduced by the funded projects. These reductions will most likely occur in the Houston-Galveston and Dallas–Fort Worth areas. However, both the commission and the TERP advisory board can recommend going out beyond these two areas.

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 surface waters meeting or exceeding water quality standards

Short Definition: Percent of Texas 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 a direct environmental measure of water quality in Texas rivers, reservoirs, and estuaries.

Source/Collection of Data: The Surface Water Quality Information System Database has summary information on the water quality status for water bodies in Texas. This information was generated by comparing water sampling data collected by the agency and its cooperators with criteria established in the Texas Surface Water

Quality Standards, Chapter 307 of Title 30 of the Texas Administrative Code. Standards attainment is generated from the Surface Water Quality Monitoring Assessment Database and is reported in the TCEQ's Texas Water Quality Inventory [305(b) Report] and the 303(d) List of impaired waters.

Method of Calculation: Summary totals reported in the Texas Water Quality Inventory 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 Texas Water Quality Inventory is prepared in even years and staff are 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 typically for a period of five years. The assessment integrates natural variability in water quality and overall change in this measure, reflecting actual conditions, is relatively slow. Because the inventory is updated only every two years, this measure remains constant for two years.

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) x 100.

Data Limitations: 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: Yes.

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 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 municipal solid waste (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 for some time to come, despite the best efforts to encourage recycling and reuse.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.09 Percent of TERP grants derived from New Technology Research and Development (NTRD) technologies

Short Definition: This measure shows the percent of the total dollar amount of TERP grants that use technologies derived from grants of the NTRD program.

Purpose/Importance: The percent of dollar amount of TERP grants that use technologies derived from grants of the NTRD program will provide an account of the impact that the NTRD program has on the TERP, as it applies to getting cost-effective technologies to the marketplace.

Source/Collection of Data: The TCEQ database or the Texas Environmental Research Consortium (TERC) provides the number of grants awarded for each fiscal year.

Method of Calculation: The percent of the total dollar amount of TERP grants derived from NTRD technologies will be calculated by the number of dollars of TERP grants that use NTRD technologies awarded divided by the total number of dollars of TERP grants awarded.

Data Limitations: The number of grants awarded is limited by number and/or applicability of TERP eligible technologies verified or certified and the cost-effectiveness of those technologies when considered for the TERP program. Verification or certification by the EPA or CARB is solely the responsibility of the certifying agency. Neither the TCEQ nor TERC have control of the technology, or the process of verification or certification, once the technology is submitted.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 01-01.10 Percent of high- and significant-hazard dams inspected within established time frames

Short Definition: Percent of high- and significant-hazard dams that have had safety assessments performed within established time frames. Assessments include on-site investigations as well as in-house review of plans and specifications for dams, spillway adequacies, breach analyses, emergency action plans, and engineering reports involving high- and significant-hazard dams.

Propose/Importance: The assessments are conducted to ensure the safe design, construction, maintenance, repair, and removal of dams in the state. The percent of assessments conducted on high- and significant-hazard dams allows a comparison of state performance to federal program recommendations.

Source/Collection: Dam Safety Investigation staff enter investigation information into the Dam Safety Project Tracking Database or any successor database.

Method of Calculation: Using information obtained by running queries of the Dam Safety Project Tracking Database, performance is calculated using the following formula: (number of high- and significant-risk dams that have been inspected within the federal standards / total number of high- and significant-risk dams) x 100.

Data Limitations: None.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Outcome 01-01.11 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: The 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 Water Programs Section of the Chief Engineer's Office.

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, 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 the GBEP and CBBEP will consider differences in land cost in the two geographical areas.

Calculation Type: Non-cumulative.

New Measure: Yes.

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 nonattainment areas in the state or by the NAAQS levels; should the number of nonattainment 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 output measure.

Calculation Type: Cumulative.

New Measure: Yes.

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 or 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 constitute a very significant source of air emissions. In some ozone nonattainment areas they are considered the largest source of ozone-forming pollutants. Emissions from these sources are included in strategies associated with ozone nonattainment area State Implementation Plans. Assessments are also used to evaluate the impacts of different vehicle inspection/maintenance programs, roadway construction projects and transportation control measures.

Source/Collection of Data: Assessment counts are dependent on Air Quality Division staff reporting. Emission calculations/assessments are dependent on the inputs to the MOBILE computer model used to develop emission factors, as well as 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 both at 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 as 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 constitute a very significant source of air emissions. Emissions from these sources are included in strategies associated with nonattainment 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: Yes.

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 Monitoring Operations Division that 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, 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 is calculated using the methodologies established in the TCEQ's *Guidelines for Emissions Reduction Incentive Grant*s (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.

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 AirCheckTexas 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, electronic data available as of the close of the quarter from each participating county will be reported. The data will then be updated, if necessary, based on the final quarterly reports submitted by the participating counties.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 01-01-01.08 Number of New Technology grants approved to fund technologies to be submitted for verification or certification by the EPA or CARB

Short Definition: This measure shows the number of grants that are approved to fund technologies to be submitted for verification or certification testing with the EPA or CARB. This number indicates how many New Technology Research and Development (NTRD) grant derived technologies may be eligible for future funding in the TERP program.

Purpose/Importance: This measure shows the number of NTRD grants approved for funding that may lead to technologies eligible under the Texas Emissions Reduction Program (TERP) grants program. Technologies are not eligible for TERP funding unless they have been verified or certified by the EPA or CARB.

Source/Collection of Data: The Texas Environmental Research Consortium (TERC) provides the number and type of NTRD grants awarded in a given quarter.

Method of Calculation: The sum of all NTRD grants awarded by TERC in a quarter that fund technologies to be submitted for verification or certification testing by the EPA or CARB.

Data Limitations: The number of grants awarded is limited by funding constraints and the size of the projects proposed by applicants. The NTRD program is implemented by TERC. The TCEQ has very little control over when grant applications are requested or awarded.

Calculation Type: Cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Efficiency 01-01-01.01 Percent of data collected by the TCEQ continuous and non-continuous air monitoring networks

Short Definition: Percent of data collected by the 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 the TCEQ's automated data collections systems for continuous data and the TCEQ's non-continuous air monitoring databases for non-continuous data. The data will be reported during the quarter in which is it validated (the quarter after it is collected), and the sampling periods will be as follows as required 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 mobiles 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 is 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 agency.

Purpose/Importance: The measure attempts to quantify the surface water quality assessment activities of the agency. Assessment of water quality is essential to identification of impacted water bodies, development of water quality standards, development of effluent standards for wastewater discharges, and development of watershed restoration and implementation strategies.

Source/Collection: Surface water assessments reported under this measure may be performed by TCEQ staff, by contractors, or by a combination of TCEQ staff and contractors. The Monitoring Operations Division of the Office of Compliance and Enforcement performs and reports the Clean Rivers Program Assessment report, Clean Water Act § 319 NPS Assessment and Management Program, Clean Water Act § 319 Annual Report, Water Quality Management Plan updates from the designated regional planning agencies, and the Integrated Water Quality Monitoring and Assessment Report, and special studies. The Water Quality Division of the Office of Permitting, Remediation, and Registration performs and reports Water Quality Management Plan updates for effluent limitations for areas not included in updates developed by designated regional planning agencies and Receiving Water Assessments. The Water Programs Section of the Chief Engineer's Office performs and reports Total Maximum Daily Load (TMDL) activities and estuary program assessments, which include (1) TMDLs adopted by the commission, (2) assessments approved by the U.S. Environmental Protection Agency as equivalent to TMDLs resulting in the de-listing of an impairment, (3) TMDL implementation plans (I-Plans) adopted by the

commission, and (4) estuary program assessments finalized by either the Galveston Bay Estuary Program or the Coastal Bend Bays and Estuaries Program. The Monitoring Operations Program (MOP) of the Office of Compliance and Enforcement (OCE) performs and reports the Integrated Water Quality Monitoring and Assessment Report and special studies.

Method of Calculation: The assessments are tracked manually and reported to Strategic Planning and Assessment by the respective division identified along with any required explanation of variance from the projected performance of that division. Each segment/parameter pair counts as one output for TMDLs, I-Plans, and TMDL equivalents. The sum of all assessments is reported quarterly for the agency by Strategic Planning and Assessment.

Data Limitations: The individual assessments included in the measure range from assessments requiring as little as one week to as much as five years to complete. Certain assessments may come due every year, every other year, every three years or every five 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. Depending upon 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.

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 of Data: The Water Supply Division (WSD) of the Office of Permitting, Remediation, and Registration (OPRR) 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.

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 Project Tracking Database, or any successor databases, this measure is the total number of dam safety assessments completed in the reporting period. 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 and water use permit applications involving dams. Assessments are conducted to ensure the safe design, construction, maintenance, repair and removal of dams in the state.

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 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.

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: Field investigators enter investigation information into the Dam Safety Project Tracking Database or any successor database. Each reporting period Field Operations retrieves from the database the number of assessments completed from the database. USAS 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 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 x (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 Percentage of surface water impairments that are addressed within 13 years of impairment listing

Short Definition: Percentage of surface water impairments that are addressed within 13 years of impairment listing.

Purpose/Importance: Critically important objectives of the TCEQ are to identify impaired surface waters and to restore water quality to a degree that allows attainment of all uses identified in the Texas Surface Water Quality Standards. Substantial staff and monetary resources from State and federal sources are applied to this

effort, but existing LBB performance measures do not gage the level of effort and progress by the TCEQ on these objectives. In its 2004 strategic plan, the U.S. EPA established a 13-year benchmark for each state to complete efforts to address all CWA 303(d) listed impairments. The TCEQ must report its progress on this same measure to the EPA.

Source/Collection of Data: The TMDL Section annually prepares and reports the status of TMDLs and 303(d) impairments using data entered and routinely updated into the TMDL Project Database.

Method of Calculation: The complete definition of this measure is "Percentage of impairments in surface water bodies in Texas (CWA 303(d) List) that are addressed by commission action either: to adopt a total maximum daily load (TMDL), to de-list an impairment, or to adopt a revised water quality standard within 13 years of an impairment listing." The outcome measure would be computed annually based upon the status of each impairment on Aug. 31 of each year. The percentage of impairments addressed within the 13 year time frame is computed after reviewing agency actions taken with regard to each 303(d) List beginning in 1996 through present. As an example, impairments in 1996 would need to be addressed by Aug. 31, 2009 (1996 + 13). When an impairment remains on subsequent lists, the date of its first listing is used in the computations. The date of actions to establish a TMDL, de-list an impairment, or revise a water quality standard is based upon commission adoption of the action, regardless of whether the U.S. EPA also approved the action.

Data Limitations: All data for developing and reporting the outcome are readily available. The most significant limitation is developing an accurate projection of when assessments and TMDLs will be completed. Assessment work on 5b/5c waters will typically result in the need for a TMDL, making a two-step process handled by different divisions and requiring close collaboration on priorities. TMDL project completion is sometimes delayed due to stakeholder involvement and concerns.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-01-02.03 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 Team in the Field Operations Division will use information from field inspections and new water-rights permit applications to maintain and update an existing database of approximately 7,500 dams. The database will be updated quarterly by the additional listing of new dams and updated changes in the attributes of existing dams.

Method of Calculation: The database will be queried for the number of existing dams in the database.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 01-01-03.01 Number of municipal solid waste facility capacity assessments

Short Definition: The number of annual capacity assessments for municipal solid waste landfills reviewed by the Waste Planning Team.

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 sent annually to municipal solid waste landfills by the Waste Planning Team. The returned forms are reviewed for consistency with previously reported capacity data, as well as for consistency with related permit and fee data. Data is then entered into a computer database.

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 in the state. This number may be affected by the issuance of new permits as well as 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 assessment.

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 USPS. 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 will have been determined.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

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 is 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 this 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: Yes.

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 – 240 days; amendments – 270 days; new federal permits (such as, prevention of significant deterioration, nonattainment, 112(g), or 112(j)) and their major modifications – 330 days; permits-by-rule, standard permits without public notice, changes to qualified facilities, and relocations – 45 days; standard permits for concrete batch plant – 150 days; multiple plant permits, – 330 days; alterations and other changes, *de minimis* requests – 120 days; renewals – 270 days; maintenance, startup, shutdown (MSS) permits – 365 days. Target time frames for Title V Applications: Site Operating Permits (SOP) initial issuance, revisions, and renewals – 330 days; SOP voids and off permit and operational flexibility (OP) notifications – 60 days; General Operating Permits (GOP) initial issuances – 120 days; GOP revisions – 330 days; GOP renewals – 210 days; 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 enter all pertinent application information into the wastewater permitting databases as the application is processed. Staff query this database and total the number of completed reviews within the fiscal year. Staff then subtract the completed date from the administratively complete 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 report 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 Supply Division's staff is in compliance in processing permit applications within established time frames.

Source/Collection of Data: Staff enter all pertinent application information into the water-rights permitting databases as the application is processed. Staff query this database and total the number of completed reviews within the fiscal year. Staff then subtract 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 report 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 Permitting, Remediation, and Registration, 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. A reviewed application is defined as: transmittal of the final draft permit from the program to the Chief Clerk's Office (for those permit applications subject to notice requirements); completion of other final actions (for those permit applications not subject to notice requirements); 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, renewals, major and minor amendments, and minor modifications for UIC Class V Injection Wells, (5) new, registrations, major and minor amendments, and notice and no-notice modifications for municipal solid waste, and (6) new, renewals, major and minor amendments for radioactive material licenses. Excluded are the delayed permit applications for interim status closures, protective filings for interim status units that will be permitted with renewals for the combustion strategy implementation.

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 (FCAA) (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 FCAA. 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. 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. This information is retrieved by running a query on the EBT database. 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: Yes.

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 (FCAA) that were 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 Federal Clean Air Act, 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 Division (FOD). This information will be based on EA plan reviews that are completed and entered into the FOD water program databases 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 Division provides their data to Strategic Planning and Assessment. 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 Field Operations, 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 query these databases for application reviews completed this quarter and review monthly activity reports for ownership changes and supply contracts. The numbers reported by Water Rights Permitting do not include FOD numbers.

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 Wastewater Permitting 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 WWC 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 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.

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 is 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 is used. Waste streams are audited on a random basis or manually selected from the TRACS database 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 Quattro Pro spreadsheet. On a quarterly basis the total is derived, reconciled against information from the TRACS 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 nonhazardous waste permit applications reviewed

Short Definition: Number of nonhazardous waste permit applications reviewed. For the Municipal Solid Waste (MSW) Permit Section, includes the number of permit reviews for new, modified, or amended MSW storage, treatment, processing, and disposal facilities and renewed or amended commercial industrial nonhazardous waste landfill (CINWL) facilities.

Purpose/Importance: This measure quantifies the number of reviews conducted to ensure 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 Office of Permitting, Remediation, and Registration, MSW Permits Section. 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 Office of Permitting, Remediation, and Registration, 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 nonhazardous waste landfill facilities, (3) the number of technical completions prepared for municipal solid waste and commercial industrial nonhazardous waste landfills, (4) the number of municipal solid waste and commercial industrial nonhazardous waste landfill applications denied and withdrawn by the commission, and (5) the number of new and modified MSW registrations.

Method of Calculation: Totals are calculated by adding the numbers for each category together.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

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 nonhazardous 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, Class 3), post closure care orders and regulatory flexibility orders; Class I, Class III, and Class V Underground Injection Control (UIC) wells (new, renewed, major and minor amendments, minor modifications, and regulatory flexibility orders), and radioactive material disposal 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 Office of Permitting, Remediation, and Registration, 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 and (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, order or license 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 completed items together.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 01-02-03.01 Number of nonhazardous waste permits issued

Short Definition: Number of nonhazardous 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 Office of Permitting, Remediation, and Registration, this measure will be reported by calculating the number of permits and registrations issued

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 Municipal Solid Waste Permit Section from the Chief Clerk's Office.

Method of Calculation: Query agency databases for reported performance. Totals are calculated by adding up the number of issued permits.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

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 nonhazardous waste storage and processing permits or orders; UIC permits, orders, and authorizations; and radioactive material licenses issued.

Purpose/Importance: This measure reflects agency workload with regard to the number of permits/orders/authorizations/licenses issued.

Source/Collection of Data: Using an agency database maintained by the Office of Permitting, Remediation, and Registration, this measure will be reported by calculating, the number of permits, orders, authorizations, and licenses issued for hazardous waste facilities, industrial nonhazardous storage and processing waste facilities, UIC Class I injection wells, UIC Class III injection wells, UIC Class V injection wells and low-level radioactive waste facilities. A permit, order, authorization or license 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 number of issued permits together.

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 nonhazardous 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 nonhazardous waste landfills.

Source/Collection of Data: Using an agency tracking system and manual record reviews maintained by the Office of Permitting, Remediation, and Registration, this measure will be reported by calculating the number of municipal solid waste and commercial industrial nonhazardous 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 nonhazardous 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: Yes.
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 either entered into the Consolidated Compliance and Enforcement Data System (CCEDS) or 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 Compliance Support Division staff scan or manually enter 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 on time.

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 Compliance 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 Compliance Support Division, and Field Operations 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 on time.

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 Compliance Support Division staff generate 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: Yes.

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 issued maintained by the agency.

Source/Collection of Data: The Operator Licensing Section adjusted 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 taking the Operator Licensing Section adjusted annual budget and then dividing by the total number of licenses and registrations 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 Compliance 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.

Outcome 01-03.01 Percent of scheduled licensing activities completed

Short Definition: Percent of scheduled licensing process milestones completed, based upon an estimated completion date of 2008.

Purpose/Importance: This measure will demonstrate the progress made toward licensing a low-level radioactive waste disposal facility.

Source/Collection of Data: Data will be provided by the Office of Permitting, Remediation, and Registration. Twenty-two milestones have been identified by the program area to show the progression of the licensing process. The milestones are as follows: TCEQ Writes Rules to Implement Bill, 6/1/03–1/8/04, 222 days; Publish Notice to Receive Application, 1/9/04; Application Prepared by Applicant, 1/10/04–7/7/04, 180 days; TCEQ Accepts Applications, 7/8/04–8/6/04, 30 days; TCEQ Issues 1st Administrative Notice of Deficiency (ANOD), 8/7/04–9/20/04, 45 days; Applicant Responds to 1st ANOD, 9/21/04–10/20/04, 30 days; TCEQ Issues 2nd ANOD and 1st Comparative Merit (CM) Request for Information (RFI),10/21/04–11/19/04, 30 days; Applicant Response to 2nd ANOD and 1st CM RFI, 11/20/04–12/19/04, 30 days; TCEQ Issues 3rd ANOD, if necessary, and 2nd CM RFI, 12/20/04–1/18/05, 30 days; Applicant Response to 3rd ANOD and 2nd CM RFI, 1/19/05–2/17/05, 30 days; TCEQ Issues Notice of Administrative Completeness, 2/18/05–3/19/05, 30 days; TCEQ Holds Public Meeting, 3/20/05–4/3/05, 15 days; TCEQ Executive Director Selects Applicant by CM, 4/4/05–5/3/05, 30 days; TCEQ Issues 1st Technical Notice of Deficiency (TNOD) 5/4/05–9/5/05, 125 days; Applicant Response to 1st TNOD, 9/6/05–11/19/05, 75 days; TCEQ Issues 2nd TNOD, 11/20/05–1/18/06, 60 days; Applicant Response to 2nd TNOD, 1/19/06–3/19/06, 60 days; TCEQ Issues Draft License to Chief Clerk, 3/20/06–7/27/06, 130 days; TCEQ Issues Notice of Draft License and Opportunity for Hearing, 7/28/06–9/10/06, 45 days; SOAH Hearing, 9/11/06–9/10/07, 365 days; TCEQ Issues License, 9/11/07–12/9/07, 90 days; License Takes Effect, 12/9/07.

Method of Calculation: The number of steps completed will be divided by the number of steps in the licensing process. This will yield the percent of completion of the licensing process. Results will be reported as a cumulative percent of the overall licensing process with the final step in the process being completed by fiscal 2008.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above 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 total Texas residential population of all public water systems (PWSs) that have not had maximum contaminant level (MCL) violations, lead action level, or treatment technique violations.

Purpose/Importance: Measures the success of our performance outputs and all 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 data that is submitted to the TCEQ from certified laboratories after samples are collected by PWS personnel or by contract sample collectors. Chemical and microbiological data are kept in the TCEQ's Central Records. Population data is kept in a Water Utilities Data System (WUD), while violation data is kept in the Safe Drinking Water Information System.

Method of Calculation: Using the public water supply (PWS) inventory and the violation databases, the measures will report the total Texas residential population of all PWSs that have not had Maximum Contaminant Level (MCL) violations as described by the Drinking Water Standards. This population figure is divided by the total population served by all water systems, multiplied by 100 to derive a percentage. (Total state population served by public water systems is defined from data projected by the comptroller's office and census data.)

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 02-01.02 Percent of Texas public water systems protected by a source water protection program

Short Definition: The percent of Texas community public water systems (PWS) that have been provided the tools to initiate a source water protection program. These tools include a detailed susceptibility assessment report for each system reporting their susceptibility to drinking water contaminants, locations of all potential contaminant sources, and recommended actions to address these potential contaminants.

Purpose/Importance: This measure addresses the extent to which source water protection services are being provided and targeted towards susceptible public water supply systems. These services include identification of the contributing area, identification of potential sources of contamination (PSOC), a site specific report that explains these PSOCs, and recommendations on how to eliminate or minimize these threats. It is far more cost-effective to prevent a water source from being contaminated than to remediate it or to find an alternative source.

Source/Collection of Data: Population information is gathered during each sanitary survey of PWS conducted by TCEQ field staff. Field staff also provide location of water sources and sanitary set back information for each well. Chemical data from the Water Utilities Data System (WUD) and other inter/intra agency databases are used to determine susceptibility through the Source Water Assessment and Protection software. Ground inventories of PSOCs will be conducted by TCEQ staff, outsource contractor, or PWS personnel/volunteers and incorporated into PSOC databases. Locations are derived through GPS and GIS technology.

Method of Calculation: A percentage is obtained by dividing the number of community PWS that have been provided the tools for participating in a protection program by the total number of community PWS, multiplied by 100. Participation is defined when one of the following is met: (1) has had a ground PSOC inventory conducted or updated within the last seven years, (2) has been provided the current assessment results with maps of PSOCs and associated best management practice (BMPs) strategies within seven years, or (3) has actively initiated protection strategies and BMPs within the last seven years.

Data Limitations: Poor locational accuracy may affect the susceptibility determination.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 02-01.03 Percent of Texas population served by public water systems protected by a program that prevents connection between potable and non-potable water sources

Short Definition: Percent of Texas population served by public water systems protected by a program that prevents connection between potable and non-potable water sources.

Purpose/Importance: To indicate what percentage of the population is served by public water systems that have viable cross-connection control programs. Having a viable cross-connection control program protects the public water system from contamination caused by siphonage or backflow of pollutants into the system as a result of low or inadequate pressure.

Source/Collection of Data: Data collected from cross-connection control program questionnaires that were mailed to all public water systems in the state of Texas, sanitary surveys completed by TCEQ regional staff, and on-site visits by central office staff to survey public water systems that did not respond to the mailed surveys.

Method of Calculation: Using public water supply databases, the total of the Texas residential population served by community water systems that have implemented a program that prevents connection between potable and non-potable water sources will be divided by the total residential population served by community public water systems, all of which are required by agency rule to have such a program. This measure will track the compliance rates of such systems with this rule.

Data Limitations: Data is limited by the information provided by the public water systems in the returned cross-connection questionnaires. Data is also limited by the accuracy of the reported population of the state of Texas.

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 our performance outputs and 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 data that is submitted to the TCEQ from certified laboratories after samples are collected by PWS personnel or by contract sample collectors. CCI reports as well as chemical and microbiological data are kept in the Central Records facility. Public water system data is kept in the Water Utilities Data System (WUD) and the Safe Drinking Water Information System.

Method of Calculation: Using the PWS inventory and the violation databases, 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 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 assure safe drinking water and protect public health. Samples must be collected in order to be analyzed.

Source/Collection of Data: Chemical samples are collected by PWS personnel or contract sample collectors and the numbers are reported to the Public Drinking Water (PDW) Section's Drinking Water Quality (DWQ) Team on a monthly basis. Original data are kept in the Central Records facility located in Building F, first floor. It is also maintained electronically. Chemical data is kept in database tables. Field investigators enter investigation information into the monthly Workplan Commitment Report or its successor database. Each reporting period Field Operations retrieves from the report or its successor database the number of samples collected.

Method of Calculation: The number of chemical samples is set by the requirements of the Drinking Water Standards, and the anticipated number is maintained in the DWQ Team database, following team standard operating procedures. Chemical samples collected from PWSs are reported from two sources. The number of samples collected by the PDW Contractor is tracked by the chemical sample schedule coordinator on the DWQ Team and reported on the Public Drinking Water Section Monthly Activity Report while samples collected by the TCEQ Field Operations Division will be reported as totals obtained from the Workplan Commitment Report or its successor database. The numbers are totaled on a monthly 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 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 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/investigation activity as regulated entities are inspected/investigated to assure compliance with rules, regulations, and statutes designed to protect human health and the environment. Measuring compliance rates of sites 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: This information is tracked using the databases in the Enforcement and Field Operations Divisions. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (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/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/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 databases in the Enforcement and Field Operations divisions 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 (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/statutes, including water-rights sites, wastewater treatment facilities, public water supply systems, sludge/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/investigation activity as regulated entities are inspected/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: This information is tracked using databases in the Enforcement and Field Operations divisions. An enforcement action is defined as issuance of an order, compliance agreement, or referral to an appropriate agency or division (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/investigated for compliance with waste rules/regulations/statutes minus the total number of cases screened and approved for enforcement action, dividing this difference by the total number of facilities inspected/investigated for compliance with waste rules/regulations/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 the Enforcement Database, 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 (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/investigation activity as occupational certification licensees are inspected/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 databases in the Enforcement and Compliance Support divisions. 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/investigated by the Compliance Support Division 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 the Enforcement database.

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: Yes.

Desired Performance: Above projections.

Outcome 03-01.07 Percent of administrative penalties collected

Short Definition: Percent of administrative penalties collected.

Purpose/Importance: Reflects how much penalties are collected.

Source/Collection of Data: This measure will be calculated using databases maintained by the Financial Administration Division.

Method of Calculation: This measure will be calculated 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 x 100 will yield the percent of administrative penalties not collected during the fiscal year. Subtracting this calculation from 100% 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.

Outcome 03-01.08 Tons of emissions and waste reduced and minimized as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs

Short Definition: Tons of air emissions, discharges to water, wastes reduced and minimized and material-use, water-use, and energy-use reductions as reported by the regulated community participating in pollution prevention, environmental management systems, and innovative programs.

Purpose/Importance: This measure provides an indication of the Small Business and Environmental Assistance Division's ability to encourage the regulated community to implement pollution prevention and waste minimization practices and technologies. The measure provides a measurable indicator of emissions and waste reduced and minimized in Texas as a result of pollution prevention/waste minimization and environmental management system implementation efforts. It also serves as an indicator of water and energy conservation, materials use reduction, and other efforts in Texas.

Source/Collection of Data: Environmental performance reporting data submitted by the regulated community are documented for entities participating in Clean Texas Resource Exchange Network for Eliminating Waste (RENEW) and site assistance visits. Data is collected from participating entities through required performance reporting and voluntary surveys. Reduction information is collected by Small Business and Environmental Assistance staff and entered into a Paradox database.

Method of Calculation: Tons of hazardous waste, nonhazardous waste, air emissions, and discharges to water decreased and tons of RENEW materials transferred during the reporting period are calculated and compared to the previous year's level. Material use, water use, energy use, and land use data will also be collected. Each reporting facility's reductions totals are then summed to calculate total tons reduced.

Data Limitations: Reduction information is provided by businesses through required performance reporting and voluntary surveys. Tons of emissions and waste prevented/minimized is based on the previous year's data. Expanding facilities must often rely on estimates to determine a reduction number during periods of increased production.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.09 Amount of financial savings achieved as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs

Short Definition: Dollar amount of savings voluntarily reported by the regulated community resulting from reduced purchases of raw materials, avoided disposal costs, and reduced compliance costs through the Small Business and Environmental Assistance Division's technical assistance activities.

Purpose/Importance: This measure provides an indication of the Small Business and Environmental Assistance Division's ability to encourage the regulated community to implement pollution prevention and waste minimization practices, innovative programs, and environmental cost accounting practices. The measure provides a measurable indicator of the financial savings achieved through pollution prevention/waste minimization and innovative programs.

Source/Collection of Data: Implemented projects and cost savings information is documented for facilities that have participated in pollution prevention and environmental management site assistance visits, Clean Texas Resource Exchange Network for Eliminating Waste (RENEW), and other innovative programs. Data is collected from participating entities through required performance reporting and voluntary surveys. Reduction information is collected by Small Business and Environmental Assistance staff and entered into a Paradox database.

Method of Calculation: Dollar savings is voluntarily calculated by the regulated entity for each facility and documented on a survey instrument provided by the commission to show the financial savings during the reporting period and compared to the previous year's level. Each reporting facility's financial savings are then summed to calculate statewide savings.

Data Limitations: Financial information is provided by the regulated community on a voluntary basis through an annual survey based on the previous year's data. The regulated entity relies on both documented costs savings and estimates based on environmental cost accounting principles to measure environmental compliance costs.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Outcome 03-01.10 Tons of emissions and waste reduced and minimized in the Texas-Mexico border region as reported by the regulated community implementing pollution prevention, environmental management systems, and other innovative programs

Short Definition: Tons of air emissions, discharges to water, and wastes reduced and minimized and material-use, water-use, and energy-use reductions as reported by the regulated community participating in pollution prevention, environmental management systems, and innovative programs.

Purpose/Importance: This measure provides an indication of the Small Business and Environmental Assistance Division's ability to encourage the regulated community along the Texas-Mexico border region to implement pollution prevention and waste minimization practices and technologies. The measure provides a measurable indicator of emissions and waste reduced and minimized in Texas as a result of pollution prevention/waste minimization and environmental management system implementation efforts. It also serves as an indicator of water and energy conservation, materials use reduction, and other efforts in Texas.

Source/Collection of Data: Implemented projects and emissions and waste reduction information are documented for facilities who have participated in pollution prevention and environmental management site assistance visits, Resource Exchange Network for Eliminating Waste (RENEW) and other innovative programs. Data is collected from participating entities through required performance reporting and voluntary surveys. Reduction information is collected by Small Business and Environmental Assistance staff and entered into a Paradox database.

Method of Calculation: Tons of hazardous waste, nonhazardous waste, air emissions, and discharges to water decreased and tons of RENEW materials transferred during the reporting period are calculated and

compared to the previous year's level. Material use, water use, energy use, and land use data will also be collected. Each reporting facility's reductions totals are then summed to calculate total tons reduced.

Data Limitations: Reduction information is provided by the regulated community through required performance reporting and voluntary surveys. Tons of emissions and waste prevented/minimized is based on the previous year's data. Expanding facilities must often rely on estimates to determine a reduction number during periods of increased production.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

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 considered complete when the investigation has been conducted, a report has been written, management has approved, and manager's approval date has been reflected in the database. An inspection/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. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. Investigations are conducted to ensure compliance of regulated entities with rules, regulations and statutes designed to protect human health and the environment. An approved risk-based investigation strategy is used to assist in the selection of facilities for investigation. Number does not include citizen complaint investigations or emissions events investigations.

Method of Calculation: Each reporting period, Field Operations retrieves from the database 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 the database.

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, Field Operations retrieves from the database the number completed by the Water Masters.

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 the Consolidated Compliance and Enforcement Data System (CCEDS), this measure is calculated by adding the total number of inspections/investigations completed for water entities during the reporting period. An inspection/investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and manager's approval date has been reflected in the database. Inspection/investigation is defined as the evaluation of a regulated entity against a standards and includes all (initial and follow up) compliance inspections, file reviews, site assessments and agent evaluations. Water entities include, but are not limited to, domestic and industrial wastewater treatment plants, public water supply systems, sludge/septage transporters, beneficial use sites, on-site sewage facility (OSSF) sites, compliance review audits of on-site OSSF authorized agents, 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. Inspections/investigations are conducted to ensure compliance of regulated entities with rules, regulations and statutes designed to protect human health and the environment. An approved risk-based investigation strategy is used to assist in the selection of facilities for investigation. Number does not include citizen complaint investigations or investigations of livestock and poultry operations.

Method of Calculation: Each reporting period, Field Operations retrieves from the database the number of investigations completed in the field offices as well as those completed by 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 the database.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-01.04 Number of inspections and investigations of livestock and poultry operation sites

Short Definition: Number of inspections and investigations at livestock and poultry operation sites completed.

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 livestock and

poultry operations during the reporting period. An inspection/investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and manager's approval date has been reflected in the database. 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. Site is defined as a geographic location or place where regulatory activities of interest to the agency occur or have occurred. Investigations are conducted to ensure compliance of regulated entities with rules, regulations and statutes designed to protect human health and the environment. An approved risk-based investigation strategy is used to assist in the selection of facilities for investigation. This definition formerly included investigations in the dairy outreach areas only. It now includes livestock and poultry investigations statewide. Number does not include citizen complaint investigations.

Method of Calculation: Each reporting period, Field Operations retrieves from the database the number of investigations completed. 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 the database.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 03-01-01.05 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 of regulated municipal solid waste (MSW), industrial and hazardous waste (IHW), petroleum storage tank (PST) and state II vapor recovery entities during the reporting period. An inspection/investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and manager's approval date has been reflected in the database. 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. Investigations are conducted to ensure compliance of regulated entities with rules, regulations, and statutes designed to protect human health and the environment. An approved risk-based investigation strategy is used to assist in the selection of facilities for investigation. Number does not include citizen complaints investigations.

Method of Calculation: Each reporting period, Field Operations retrieves from the database the number of investigations completed in the field offices as well as those completed by 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 the database.

Data Limitations: None identified.
Calculation Type: Cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 03-01-01.06 Number of spill cleanup inspections/investigations

Short Definition: Number of spill cleanup inspections/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 Field Operations Division spill database, this measure is calculated by adding the total number of initial, on-site spill incident inspections/investigations conducted. An inspection/investigation is defined as the evaluation of a regulated entity against a standard. Inspections/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 Field Operations Division retrieves from the database 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: No.
Desired Performance: Below projections.

Efficiency 03-01-01.01 Average inspection and investigation cost of livestock and poultry operations

Short Definition: The average cost per inspection/investigation of livestock and poultry operations.

Purpose/Importance: This measure reflects how efficiently the agency conducts investigations of livestock and poultry operations in the state. 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 USAS expenditure figures and activity reports maintained by the Field Operations Division, this measure will be reported by calculating the total funds expended during the reporting period for TCEQ monitoring of livestock and poultry operations, divided by the number of inspections/investigations, other compliance inspections and complaint investigations for livestock and poultry operations completed during the reporting period.

Method of Calculation: Query of database for number of inspections/investigations divided into the amount of funds expended during the reporting period.

Data Limitations: None identified.
Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Below projections.

Efficiency 03-01-01.02 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/investigation is considered complete when the investigation has been conducted, a report has been written, management has approved, and manager's approval date has been reflected in the database. Inspection/investigation is defined as the evaluation of a regulated entity against a standard.

Source/Collection of Data: All inspection/investigation and report completion data is entered into program databases.

Method of Calculation: This measure is derived by calculating the total number of calendar days between date of investigation and date of completion divided by the total number of completed investigations reported during the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

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 Field Operations database, this measure is calculated by adding the total number of citizen complaints investigated.

Method of Calculation: Each reporting period, Field Operations retrieves from the database the number of complaints investigated by the regional offices as well as those investigated by city and/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 the manager'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 breakdown, excursion, maintenance, startup, or shutdown of a process or operation resulting in unauthorized emissions of air contaminants. 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 Comprehensive Compliance and Enforcement Database, 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. Inspections/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 Field Operations Division retrieves from the database 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: 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, Section 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: Yes.

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; dispute resolution assistance to small businesses to resolve complaints against the agency; and government sponsored conferences; and government-sponsored conferences.

Purpose/Importance: This measure provides an indication of the responsiveness of Small Business and Environmental Assistance Division (SBEA) staff to small business and local government inquiries. This measure also indicates pro-active activities provided by SBEA 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 SBEA 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: Yes.

Desired Performance: Below projections.

Explanatory 03-01-02.01 Amount of administrative penalties paid in final orders issued

Short Definition: Amount of administrative penalties required to be paid in final administrative orders issued.

Purpose/Importance: Reflects penalties required to be paid. *Note:* This is not the amount that is paid to the TCEQ, but rather the amount that the 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 on-site technical assistance visits, presentations, and workshops conducted on pollution prevention/waste minimization and voluntary program participation

Short Definition: Total number of on-site technical assistance visits, workshops, 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 environmental management systems information to Texas businesses and organizations.

Source/Collection of Data: Site visits, workshops, and presentations are tracked by Small Business and Environmental Assistance staff, who include workshop and presentation information into the section's weekly reports. This information is then pulled from the weeklies and entered into a Paradox database.

Method of Calculation: The number of site visits, workshops, and presentations conducted during each quarter are summed. Fiscal-year totals are calculated by adding quarterly totals.

Data Limitations: None identified.
Calculation Type: Cumulative.
New Measure: No.
Desired Performance: Above projections.

Output 03-01-03.02 Number of entities participating in voluntary programs

Short Definition: Number of entities participating in a voluntary program that provides incentives to an entity in return for benefits to the environment that exceeds benefits that would result from minimum compliance with applicable legal requirements.

Purpose/Importance: This measure reflects the agency workload associated with commission programs authorized under the Texas Water Code, Subchapter Q, Performance Based Regulation.

Source/Collection of Data: This measure will be reported by calculating the number of participants in the agency's Clean Texas Program, Site Assistance Visit Plus Program, and other programs authorized as innovative by the executive director. This information is maintained by the Small Business and Environmental Assistance Division in a database. The measure counts members participating in authorized voluntary programs during the reporting period.

Method of Calculation: Query of database.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 03-01-03.02 Number of quarts of used oil diverted from landfills and processed (in millions)

Short Definition: Number of quarts of used oil diverted from landfills and processed.

Purpose/Importance: This number indicates the amount of used oil that, if not received by the registered collection centers, would 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. The reports are due Jan. 25 of each year for the previous year's activity.

Source/Collection of Data: This number is obtained from the quantities of oil reported on TCEQ Form 0567, *Annual Report for Used Oil and Used Oil Filter Collection Centers,* from the box titled "Total Gallons of Used Oil Collected." Since the report is due on Jan. 25 of each year for the previous year's activity, only one number is used and is reported for the second quarter and again for the Year-to-Date Performance.

Method of Calculation: Performance data is obtained from the total quantities of oil reported on TCEQ Form 0567, *Annual Report for Used Oil and Used Oil Filter Collection Centers,* from the box titled "Total Gallons of Used Oil Collected."

Data Limitations: Some collection centers in previous years have reported the same oil twice, including the oil they transport as oil collected. This would make the number larger than it actually is. 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.

Efficiency 03-01-03.01 Average cost per on-site technical assistance visit

Short Definition: The average cost of each on-site technical assistance visit performed by Small Business and Environmental Assistance staff.

Purpose/Importance: This measure provides an indication of staff's ability to provide pollution prevention assistance and training in a cost-effective, efficient manner.

Source/Collection of Data: USAS expenditure figures for travel costs and reported time maintained by the Small Business and Environmental Assistance Division are used to calculate the total funds expended and encumbered through the reporting period for on-site technical assistance visits. This is then divided by the total number of on-site visits to determine an average cost per visit for the reporting period.

Method of Calculation: This measure will be calculated by totaling funds expended and encumbered through the reporting period and divided by the number of visits conducted through the period.

Data Limitations: Average cost per site visit may not necessarily be an indicator of staff efficiency. Certain areas in Texas are more expensive to visit; travel to those locations incurs more costs than visits to other locations even when staff efficiency is high. Additionally, time spent preparing for visits and following up after visits is not captured.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below 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 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 the Waste Reduction Policy Act (WRPA). This information is maintained in a Paradox database.

Method of Calculation: The measure is calculated by adding up the source reduction number from all facilities reporting.

Data Limitations: Data is dependent upon 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 collection and cleanup events

Short Definition: The tons of waste collected through household hazardous waste and empty pesticide container collections and cleanup events, including river and lake and rural cleanups, coordinated, sponsored or assisted by the TCEQ.

Purpose/Importance: This measure provides data on how much household hazardous waste and litter was collected and properly disposed of in Texas, thus reducing the impact on the environment.

Source/Collection of Data: Manual count of agency records. This data reports results of collection events as submitted by entities holding events. Staff maintains the data in a spreadsheet database.

Method of Calculation: Summation of all related events in Texas.

Data Limitations: Data quality is limited to quality of reports submitted to agency.
Calculation Type: Non-cumulative.
New Measure: No.
Desired Performance: Above projections.

Explanatory 03-01-03.03 Tons of agricultural waste chemicals collected by TCEQ-sponsored entities

Short Definition: The tons of agricultural waste chemicals collected by agency contractors. The contractor(s) will report to the agency the amount of all agricultural waste chemicals weighed and measured at each collection.

Purpose/Importance: This measure provides data on the quantity of agricultural waste chemicals collected and properly disposed of in Texas, thus reducing the impact on the environment.

Source/Collection of Data: The contractor(s) will report to the agency the amount of all agricultural waste chemicals weighed and measured at each collection. Staff maintains the data in a spreadsheet database.

Method of Calculation: Summation of weights of wastes collected at events reported by contractors.

Data Limitations: None.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 03-01-03.04 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 a Paradox file from TMS. This number represents the universe of facilities that either transport, store, process, recycle or burn for energy recovery, scrap tires.

Method of Calculation: The Field Operations Division 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 does not 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 Percent of Superfund sites cleaned up

Short Definition: The percentage of state and federal Superfund sites cleaned up 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 of the Office of Permitting, Remediation, and Registration, the percentage of state and federal Superfund sites cleaned up since program inception.

Method of Calculation: The total combined number of state and federal Superfund sites completed divided by the total combined number of state and federal Superfund sites listed or proposed for the State Registry and National Priorities List since program inception. The ratio of this cumulative data will be calculated at the end of each fiscal year/biennium. This number will be multiplied by 100 to derive a percentage.

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 U.S. Environmental Protection Agency. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also effect 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.

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 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 Office of Permitting, Remediation, and Registration.

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, number of documents submitted, or the types or quality of documentation submitted to pursue self-implemented cleanups.

Calculation Type: Non-cumulative.

New Measure: Yes.

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 system (TRACS and PDOX files) maintained by the Permitting and Remediation 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/safety (i.e., 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/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: Because most leaking petroleum storage tank emergency situations are reported by fire marshals, communities and/or the agency's regional offices, 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 Reimbursement Fund applications processed

Short Definition: Number of Petroleum Storage Tank Remediation Fund reimbursement applications processed.

Purpose/Importance: This measure reflects agency workload in processing applications for reimbursements for petroleum storage tank remediation.

Source/Collection of Data: Using an automated agency system and manual computations conducted by the Remediation Division, this measure will report the number of Petroleum Storage Tank Remediation Fund reimbursement applications processed. Staff enter new and protested applications into the reimbursement process database. As applications are processed, staff update the database to indicate where the application is in the review process. When the application processing is complete a fund payment report is mailed to the applicant. For the reporting period, the number of fund payment reports mailed are calculated from the database and reported.

Method of Calculation: Automated agency systems maintained by the Remediation Division will be queried to obtain the number of fund payment reports mailed.

Data Limitations: None identified.

Calculation Type: Cumulative.

New Measure: No.

Desired Performance: Above projections.

Output 04-01-01.04 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 does not 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 review and respond to remedial action plans

Short Definition: This measure provides the average number of days for the agency to review and respond to remedial action plans over the reporting period.

Purpose/Importance: House Bill 2587, 74th Legislature, 1995 mandates that agency review and response time for remedial action plans not exceed 30 days.

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 remedial action plans received is tracked, the number of days to review and respond to each plan is recorded, and the average review/response time is calculated for the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Efficiency 04-01-01.02 Average time (days) to review and respond to risk-based site assessments

Short Definition: This measure provides the average number of days for the agency to review and respond to risk-based site assessment reports over the reporting period.

Purpose/Importance: House Bill 2587, 74th Legislature, 1995 mandates that agency review and response time for risk-based site assessment reports not exceed 30 days.

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 risk-based site assessment reports received is tracked, the number of days to review and respond to each report is recorded, and the average review/response time is calculated for the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Efficiency 04-01-01.03 Average time (days) to process Petroleum Storage Tank Remediation Fund claims

Short Definition: The average number of days it takes to process Petroleum Storage Tank Remediation Fund reimbursement claims.

Purpose/Importance: This measure reflects how efficiently and quickly the agency processes claims for reimbursements from the Petroleum Storage Tank Remediation Fund.

Source/Collection of Data: Using manual calculations and automated information maintained by the Remediation Division, this measure will report the sum of the time from receipt of all applications to the mailing of the Fund Payment Report, divided by the number of Fund Payments Reports mailed. Staff enter new applications including the date received into the reimbursement process database. As applications are processed, staff update the database to indicate where the application is in the review process. When the application processing is complete a fund payment report is mailed to the applicant.

Method of Calculation: Using manual calculations and automated information maintained by the Remediation Division, this measure will report the sum of the time from receipt of all applications to the mailing of the Fund Payment Report, divided by the number of Fund Payments Reports mailed. The number of days to complete the processing of an application is determined by calculating the number of days between the application received date and the date the fund payment report is mailed, for each application. To determine the average time to process applications, the sum of the number of days required to process the applications is divided by the number of applications processed during the reporting period.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Below projections.

Explanatory 04-01-01.01 Average cost per petroleum storage tank cleanup

Short Definition: Average cost for cleanup of petroleum storage tank sites.

Purpose/Importance: This measure reflects the average amount of reimbursement for each petroleum storage tank site.

Source/Collection of Data: This measure will be calculated by reporting on the average amount of reimbursement for each petroleum storage tank site in the cleanup process by dividing the total amount paid in reimbursements for petroleum storage tank cleanups by the total number of reimbursements processed. This information is maintained on a Remediation Division database. Staff enter new applications including the requested amount into the reimbursement process database. As applications are processed, staff update the database to indicate where the application is in the review process. When the application processing is complete a fund payment report is mailed to the applicant. The amount paid to the applicant is listed in the database.

Method of Calculation: A Remediation Division database will be queried for and the total amount paid in reimbursements for petroleum storage tank cleanups will be divided by the total number of reimbursements processed. To determine the average cost to cleanup a petroleum storage tank site, a calculation is performed on the database to determine the amount paid on each storage tank site. The average is calculated by dividing the sum of the amounts paid on each site by the number of sites on which a payment was made.

Data Limitations: None identified.

Calculation Type: Non-cumulative.
New Measure: No.
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 removal 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. 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, an incident may be determined not to be time critical, 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, the 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 brownfield 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 that 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 upon 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 cleanup completion and de-listing from the Texas Registry and the National Priorities List.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division of the Office of Permitting, Remediation, and Registration, 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, 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 U.S. Environmental Protection Agency. 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 (i.e., the nature and extent of the contamination problems) to be investigated before a remedy can be formulated. Since the program is required to investigate the nature and extent of the contamination for each site, there is not an accurate way of predicting when a site will move from an evaluation phase to a cleanup phase.

Calculation Type: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Output 04-01-02.05 Number of Superfund cleanups completed

Short Definition: The combined number of state and federal Superfund sites that were cleaned up during a reporting period that no longer pose an unacceptable risk to human health or the environment.

Purpose/Importance: Reflects the combined number of state and federal Superfund site cleanups completed during a reporting period.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division of the Office of Permitting, Remediation, and Registration, the combined number of state and federal Superfund sites attaining cleanup completion status in a reporting period.

Method of Calculation: Database query.

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 U.S. Environmental Protection Agency. Department of Defense and Department of Energy funding issues that are beyond the TCEQ's control also effect 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 cleanup 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 yearly 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: Yes.

Desired Performance: Above projections.

Output 04-01-02.07 Number of Dry Cleaner Remediation Program 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 TCEQ Remediation Division, will house all program applicants and associated dry cleaner facility data.

Method of Calculation: The DCRP database is queried for the quarterly and cumulative 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: Non-cumulative.

New Measure: Yes.

Desired Performance: Above projections.

Efficiency 04-01-02.01 Average time (days) to process Dry Cleaner Remediation Program applications

Short Definition: House Bill 1366, 78th Legislature, 2003 mandates that the agency's review and ranking of Dry Cleaner Remediation Program applications shall not 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 will utilize 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: This is a new program and no historical information exists to aid in formulating performance projections. Limitations are unknown at this time.

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, the 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 federal Superfund sites

Short Definition: Number of federal Superfund sites.

Purpose/Importance: Reflects the number of federal Superfund sites.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division of the Office of Permitting, Remediation, and Registration, 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.

Method of Calculation: Database query.

Data Limitations: None identified.

Calculation Type: Non-cumulative.

New Measure: No.

Desired Performance: Above projections.

Explanatory 04-01-02.03 Number of state Superfund sites

Short Definition: Number of state Superfund sites.

Purpose/Importance: Reflects the number of state Superfund sites.

Source/Collection of Data: Using an automated agency system maintained by the Remediation Division of the Office of Permitting, Remediation, and Registration, 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: No.
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 yearly 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: Cumulative.

New Measure: Yes.

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 Texas receives. Texas stores approximately 350,000 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: 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/action, and can serve as an indicator of increased resource needs to rectify any underdelivery. 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: Measure is calculated by dividing the actual amount of water stored in Texas' reservoirs (primarily Lake Meredith and Palo Duro Reservoir) by 350,000 acre-feet and converting to a percentage. The 350,000 acre-feet is the normal amount of water Texas has in storage during average runoff 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: No.

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 it's 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 underdelivery.

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 it's 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 it's 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 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.

APPENDIX E

Implementing the Texas Transformation

The 2007 State Strategic Plan for Information Resources Management provides a road map for agencies to plan and deploy innovative technologies. The following planning elements make up that road map and will facilitate the development of business strategies within the agency that will enhance the planning and management of the state's technology investment.

Managed Service Delivery

1. Has the agency considered use of managed services in order to focus more on its business needs?
   - Yes. The agency engaged a service provider to supply and configure workstations in a training room, to free up the agency's support personnel to service agency staff workstations. The service provider failed to provide adequate service, and agency staff had to do the work anyway.
   - Most managed services have been engaged to provide services that the agency could not provide economically, such as off-site data storage, or to provide services that the agency had budget for but not FTEs for, such as managing the central file room.
   - The largest managed services contract, for data center services, has provided poor service at greatly increased cost, and has required a substantial increase in management effort. It may eventually provide opportunities for inter-agency data sharing and improved disaster recovery capabilities, but does not appear likely to enable greater focus on agency business needs.

Managed IT Supply Chain

2. Does the agency leverage and obtain additional value from the Information and Communications Technology (ICT) Cooperative Contracts program–for example, by further negotiating not-to-exceed pricing?
   - No. The principal value of the Cooperative Contracts program to the agency is to greatly reduce the administrative burden of procurements, ameliorating the effects of force reductions in administrative personnel.

Security and Privacy

3. Describe the agency's strategies to align with the Enterprise Security Plan.
   - The TCEQ maintains a robust, multilayered security capability, including applications for Web-blocking, anti-virus, and firewalls. We perform continual system upgrades and maintain current profiles for viruses and other malware.
   - TCEQ Information Security Office staff and Internal Audit staff routinely conduct information security risk assessments. The agency uses the Information Security Awareness, Assessment, and Compliance (ISAAC) System provided by DIR to assist with risk analysis.
   - Vulnerability assessments are conducted externally by DIR or their contractors using Controlled Penetration Tests (CPT). Since 2000, the TCEQ has received four CPT assessments and one Web security assessment. The TCEQ is scheduled for CPT assessment from DIR for 2008 and 2009.
   - The TCEQ maintains Information Security Operating Policies and Procedures, Information Security Officer Standard Operating Policies and Procedures, and security procedures in the Guide for Administrative Procedures. All are available for reference by agency staff on the internal network.
   - Cybersecurity training is provided to all agency staff during agency orientation and subsequent refresher training courses. Security awareness is routinely promoted in internal staff publications.

- Information Security Office staff keeps abreast of best security practices and other mandates by attending information security conferences, seminars, and training sessions. The staff also received incident management training via the FEMA National Incident Management System course. The Information Resources Manager and other agency staff participated in a recent National Cyber Exercise.

4. Describe the agency's policies, practices, and programs, implemented or planned, that comply with relevant statutes and administrative rules to ensure the privacy of confidential data.
   - The TCEQ has implemented privacy protection procedures in our Information Security Operating Policies and Procedures. Additionally, the Information Security Office staff has drafted an agency policy on restricted personal information pending legal review and executive management approval. The agency maintains wide use of shredders to ensure protection of hard-copy restricted personal information.
   - Agency databases that may contain information marked confidential by submitters in the regulated community include appropriate controls on access to the information.

Technology Policy, Best Practices, and Partnerships

5. What current practices or plans are in place to improve usability and searchability of the agency's Web content?
   - The Publishing Section of the Agency Communications Division maintains the agency's external Web content in conformance with previous rules and standards, and maintains an effective search facility covering the site.
   - The agency has a draft policy on accessibility, checklists and implementation plans, and an Accessibility Coordinator and Accessibility Coordination Group (a subcommittee of the Information Technology Work Group) to implement recently broadened rules and guidelines to improve accessibility of all electronic media, including the Web site.
6. What current practices or plans are in place to improve life cycle management of agency data and information?
   - Chapter 7 of the TCEQ Records Management Manual outlines the agency's practices for electronic records management in compliance with TAC Chapter 13, 6.91 Definitions, 6.92 General, 6.93 Creation of Electronic State Records, and 6.94 Retention of Electronic State Records.
   - The agency's approach to meeting future open records and e-discovery requests is facilitated by the use of the PIR Collaboration System (PIRCS), an application that provides a central location in which Public Information Requests can be tracked and discussed electronically among agency staff.
7. Describe agency methods and standards, implemented or planned, intended to enhance data sharing with other entities.
   - 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, on which the agency sits, sets standards facilitating these exchanges.
   - The agency participates in the National Environmental Information Exchange Network (NEIEN) with the EPA and other state and local environmental agencies.
   - The agency has published searchable databases on its Web site to make data available on atmospheric ozone, water supply systems, etc.
   - The agency maintains a reporting service (239-DATA) offering on-request reports from agency databases.
   - The agency offers electronic reporting facilities (called STEERS and WebSTEERS) for several data streams from the regulated community, and plans to continue adding more data streams to this service.

Core Missions

8. Does the agency have any plans to simplify or reduce the number of existing software platforms?

   Yes. The agency's primary software platforms for major new application systems include:

   - Programming languages: Java, Coldfusion
   - Database platforms: Oracle

   The agency has long-range plans to move legacy applications from several other platforms, including:

   - Ingres and Ingres 4GL (also known as Open Road)
   - Paradox, and similar desktop databases
   - Lotus Notes

9. Describe any current or planned activities targeted at reducing the environmental resource consumption of technology equipment.

   - The agency conducted repeated analyses of replacing cathode-ray-tube displays with liquid-crystal desktop displays, with a view to achieving electric power savings. We switched to liquid-crystal displays when the price dropped to the point that the added cost was nearly offset by the power savings. As a by-product, the energy use and pollution resulting from the manufacturing process is also greatly reduced, because so much less glass must be fused to make the liquid-crystal display.
   - Agency policy is that workstations and displays are to be powered off at night to save power.
   - The agency's printer management policy also saves power by replacing several desktop printers with one departmental printer, reducing the standby power demand required to heat the fusing drums.
   - The agency routinely recycles toner cartridges for laser printers.

TCEQ Workforce Plan, Fiscal Years 2009–2013

This document is also provided separately to the State Auditor's Office.

Overview of the Texas Commission on Environmental Quality

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

- Implementing state and federal environmental regulatory laws by issuing permits and authorizations for: the control of air pollution; the safe operation of water and wastewater facilities; and the treatment, storage, and disposal of hazardous, industrial, and municipal waste and of low-level radioactive waste.
- Ensuring compliance with state and federal environmental laws and regulations by: conducting inspections of regulated facilities; monitoring air and water quality; providing technical assistance; encouraging voluntary compliance; and taking formal enforcement action against suspected violators.
- Developing plans for the cleanup and eventual reclamation of contaminated industrial and abandoned hazardous waste sites, and for the restoration of air and water quality.
- Setting water rates and allocating surface water rights.
- Planning for air quality, water quality, and waste management by: developing the State Implementation Plan for attainment of the National Ambient Air Quality Standards; developing total maximum daily loads to improve water quality; and analyzing solid waste generation and management in Texas.
- Ensuring that Texas receives its equitable share of water.

The TCEQ is funded primarily by fee revenues. The agency was appropriated $1.084 billion for the 2008–09 biennium, of which $959 million (88.5%) was from dedicated fee revenues. The remainder of the appropriations consisted of $85.7 million from federal funds, $20.8 million from General Revenue, and $18.8 million in interagency contracts and appropriated receipts.

Agency Mission

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.

Changes to Goals and Objectives

The agency does not anticipate significant changes to its primary programs, critical functions, or current goals, objectives, and strategies during the next five years.

Agency Structure

The TCEQ carries out its mission under the direction of three full-time commissioners, who are appointed by the governor. The commissioners are appointed for six-year terms with the consent of the Senate, and provide oversight to the seven offices of the agency. The offices are each responsible for performing unique functions within the agency, and each office has its own workforce needs and considerations.

Key Factors Facing the Agency

The TCEQ expects challenges as it proceeds to fulfill its mission and goals. Economic, environmental, and political developments indicate that the agency will experience program changes, process redesign initiatives, and technological advancements. New state and federal mandates will prove demanding in the face of budget and FTE constraints. With technical requirements

expanding, a comprehensive knowledge of agency procedures and federal regulations, as well as computing and analytical abilities, will be critical. Retirements and competition for experienced applicants, particularly those in highly skilled, hard-to-fill occupations, will present problems for our efforts to maintain a diverse, well-qualified workforce.

Retirement and Attrition

The departure of employees due to retirement is, and will continue to be, a critical issue facing the TCEQ. This loss of organizational experience, knowledge, and expertise in key management and senior-level professional positions, coupled with normal attrition, poses a critical workforce dilemma that is prevalent throughout the agency as well as the state. This institutional knowledge deficit also affects the level of succession planning that the TCEQ can implement for staff to assume important functions and leadership roles. In addition to succession planning for key positions, a greater focus on internal organizational development and training will be required. Training and mentoring emerged as the primary strategy from agency offices for addressing skill gaps due to retirements, with hiring methods ranking a close second.

Table F.1 depicts the actual projected increases in the number of employees eligible to retire.

The TCEQ estimates that approximately 784 employees will become eligible to retire over the next five years. Retirement of almost 27 percent of the agency's workforce could critically affect the agency's ability to deliver programs and accomplish its mission.

Table F.1. Projection of TCEQ Employees Eligible for Retirement, FYs 2008–2012

Fiscal Year	Projected Retirements	Percent of Total Agency FTEs (2,942)
2008	374	12.7
2009	463	15.7
2010	569	19.3
2011	672	22.8
2012	784	26.7

Data Source: Human Resources Information System, as of 8/31/07.

Almost 50 percent of the projected retirees become eligible at the end of the current fiscal year (2008).

In addition to FTE constraints, competition for qualified job applicants and changing job roles remain high on the list of issues as agency management strives to respond to the loss of employee skills. Competition with outside employers, both public and private, and limitations on entry salaries are obstacles to external recruitment efforts and retention. Other factors that affect recruitment efforts are associated costs and loss of productivity.

New Requirements and Initiatives

New federal and state requirements, as well as internal initiatives, will continue to have an agencywide impact. Program changes will occur that will require changes to existing program coverage, the elimination of certain programs, and the addition of others. A major program change, resulting from HB 1516, required the transition of agency data center services to a consolidated statewide data center and continues to greatly affect the TCEQ.

Other expected program changes are the following:

- Air quality State Implementation Plan (SIP) revision requirements are increasing with newly-defined federal mandates. SIPs are also becoming more complex and the technical requirements are expanding.
- Revision of the 8-hour ozone standard from 0.08 ppm to 0.075 ppm will increase the number of areas within the state that are out of compliance with the ozone standard. Each of these new non-attainment areas will require SIP development and increased air monitoring networks.
- The number of water quality impairments requiring Total Maximum Daily Load (TMDL) assessments is increasing. A TMDL is a technical analysis that determines the maximum amount of specified pollutants a body of water can receive and still meet the water quality standards for its intended use. After TMDLs are completed, implementation plans must be developed. These activities require an on-going commitment of

TMDL program resources, with development currently requiring increased staff resources and over 50 percent of available funding. These needs are expected to rise. Multi-year plans will be initiated and will require long-term staff resources. Start-up of new TMDLs are already being adversely affected by unavailable funds and staff. Water quality issues addressed in future TMDLs–such as bacteria, nutrients, and aquatic toxicity–continue to be more complicated than issues addressed in earlier TMDLs, which focused on legacy pollutants. Extensive public participation and conflict-resolution activities associated with TMDLs has doubled, leading to the need to hire a public facilitator.

- The health and productivity of Galveston Bay, Corpus Christi Bay, other estuary systems, and surrounding tributaries continue to be threatened by rapid population growth that is outpacing our ability to employ protection and restoration measures.
- Implementation of newly developed emission event rules and an environmental lab accreditation program.
- Changes to the mulch site guidance documents and timelines for the Edwards Aquifer Protection Program for Water Pollution Abatement Plans are being implemented.
- HB 3554 sunsets the Petroleum Storage Tank (PST) Reimbursement Program on Sept. 1, 2012.
- SB 1604 transferred the responsibility for regulation and licensing of source material recovery (uranium mining), by-product disposal, and the processing and storage of radioactive substances from the Texas Department of State Health Services (TDSHS) to the TCEQ.
- New regulatory programs to implement are included in Dry Cleaner, Municipal Settings Designation (MSD), and TWC 26.408 Water Well Notification.
- The Consolidated Compliance and Enforcement Data System (CCEDS) must be enhanced as well as continue to be maintained.
- The agency's review of enforcement programs–including the Enforcement Standard Operating Procedures (SOPs), Compliance History, Enforcement Initiation Criteria (EIC), Penalty Policy, and Supplemental Environmental Projects–will continue.
- Permit Timeframe Reduction (PTR) is essential to timely permits and economic development. Efforts will continue to study ways to improve the permit process, including e-filing and e-permitting.
- Budgetary constraints are cited as an obstacle to maximizing agency programs and deliverables. Some key areas are: travel necessary for training; improvements in data gathering, handling, management, and reporting; successful recruitment and retention of key staff; statewide dam inspection; additional and improved scientific data; and making more online resources available.

Information and Technology

To maintain and enhance the agency's level of service, respond to increasing customer demand, and implement legislative changes, the TCEQ must prepare for a number of issues in the field of information technology. These issues include:

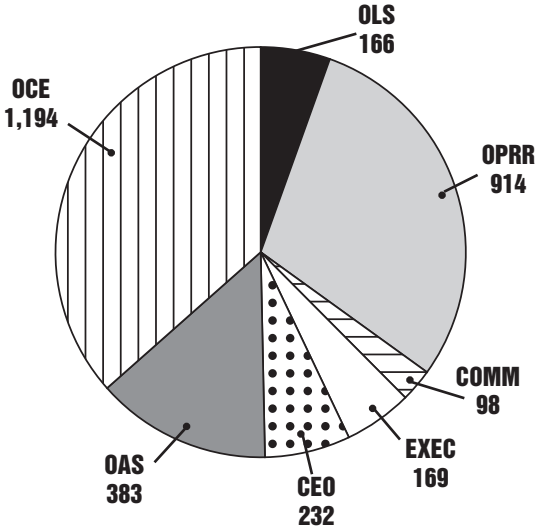
- Implementation of several legislative projects, including the addition of public information to the agency's Web site and clarification of an individual's privacy rights in the area of e-mail and information submitted on agency forms. Multi-language and accessibility requirements for the Web site will need to be addressed as well.
- Analysis and documentation of the flow of electronic information to and from the regulated community and development of efficient and effective IT systems to automate that flow.
- Development of an electronic filing system that allows customers to submit legal filings through an Internet-based system. Design, testing, and implementation will require a large investment of funding and staff resources.

- Continued improvement in electronic reporting, data handling, and data management capabilities.
- Expanding and enhancing environmental and compliance monitoring technology to secure and provide real-time data.

Current Workforce Profile (Supply Analysis)

In fiscal 2007, the TCEQ employed a cumulative total of 3,156 employees, which includes 349 separated employees. The following chart (Figure F.1) summarizes the agency workforce by office. The totals indicate an actual head count of employees, not full-time equivalents (FTEs), and do not include contractors or temporary personnel.

Figure F.1.
TCEQ Workforce by Office, FY 2007



LEGEND
COMM – Office of the Commissioners
EXEC – Office of the Executive Director
CEO – Chief Engineer's Office
OAS – Office of Administrative Services
OCE – Office of Compliance and Enforcement
OLS – Office of Legal Services
OPRR – Office of Permitting, Remediation, and Registration

Data Source: Human Resources Information System, as of 8/31/07. Data includes separations.

Location of Employees

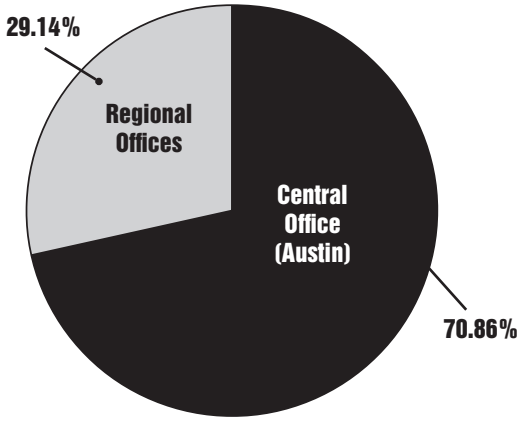
As of Aug. 31, 2007, 825 employees–or 29.14 percent of the total workforce–were located throughout the 16 regional offices (see Figure F.2). In an effort to facilitate delivery of the agency's services at the point of contact and to increase efficiencies, 99 (12%) of the regional employees were matrix-managed staff who worked in regional offices, but were supervised from the Central Office.

Workforce Demographics

Figures F.3 and F.4 depict the agency's workforce during fiscal 2007. Blacks and Hispanics constitute over 25 percent of the agency's workforce, with other ethnic groups representing over 6 percent. Of the total available Texas labor force, Blacks represent 10.52 percent and Hispanics, 27.65 percent. This reveals an underutilization of 12.5 percent. Other ethnic groups constitute 4.48 percent of the available state labor force.

The TCEQ workforce in fiscal 2007 was approximately 51 percent male and 49 percent female. Of the total available Texas labor force, males represent 54.33 percent and females, 45.67 percent. The TCEQ percentages remain basically constant from the last reporting period, fiscal 2005.

Figure F.2.
Location of TCEQ Employees, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

The TCEQ Workforce Compared to Available Texas Workforce

The TCEQ workforce comprises five employee job categories, as established by the Equal Employment Opportunity Commission (EEOC). These categories are: official/administrator, professional, service and maintenance (the paraprofessional category is now included in this category), technical, and administrative support.

Table F.2 and figures F.5, F.6, and F.7 compare the agency's workforce as of Aug. 31, 2007, to the available statewide civilian workforce as reported in the *Equal Employment Opportunity and Minority Hiring Practices Report,* a publication of the Civil Rights Division of the Texas Workforce Commission. This table reflects the percentages of Blacks, Hispanics, and females within the available Texas workforce (ATW) and the TCEQ workforce.

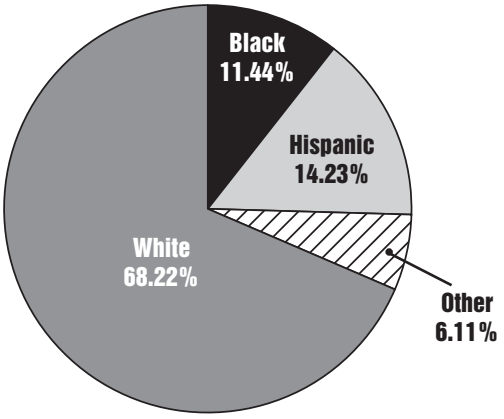
Although minorities and females are generally well represented at the TCEQ, the agency continues to strive to employ a labor force that mirrors the available statewide workforce.

Workforce Qualifications

The TCEQ employs a highly qualified workforce in a variety of program areas, performing complex and diverse duties. Strong employee competencies are critical to meet on-going program objectives and goals.

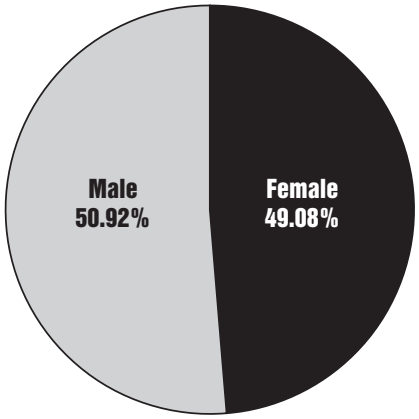
Of the agency's staff, over 23 percent are in a position for which a degree is required (see Figure F.8). Another 46 percent are in a position for which a degree is required but previous experience in the subject area may be substituted for the degree. The remaining employees, in positions not requiring a degree, constitute 29 percent of the agency's workforce.

Figure F.3.
Ethnicity of TCEQ Workforce, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

Figure F.4.
Gender of TCEQ Workforce, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

Table F.2. TCEQ Workforce Compared to Available Texas Workforce, 8/31/07

EEOC Job Category	Black		Hispanic		Female	
	ATW	TCEQ	ATW	TCEQ	ATW	TCEQ
Official/Administrator	6.6%	6.0%	14.2%	10.6%	37.3%	36.4%
Professional	8.3%	9.7%	13.4%	11.3%	53.2%	41.1%
Service & Maintenance*	13.8%	12.0%	40.7%	32.0%	39.0%	68.0%
Technical	12.4%	10.4%	20.2%	17.1%	53.8%	34.2%
Administrative Support	11.2%	20.1%	24.1%	24.1%	64.7%	84.2%

**The "Paraprofessional" category is now included in the "Service and Maintenance" category.*

Workforce Profile by Job Classification

Although almost 75 percent of the agency's employees are categorized as official/administrator, professional, and service/maintenance, the work completed by TCEQ employees is diverse, requiring the use of almost 300 different job classifications and sub-specifications. Figure F.9 shows the number of employees working in the job classification series most commonly used by the TCEQ during fiscal 2007: Environmental Investigator, Program Specialist, Administrative Assistant, Natural Resources Specialist, Engineer, Manager, Attorney, Environmental Permit Specialist, Geologist, and Engineering Specialist.

In order to meet agency goals and objectives, the TCEQ supplements its workforce with 29 contracted staff to provide vital program support and to perform various information technology functions. Restrictions on hiring contractors to augment staff resources have kept this number at a low level. Budgetary constraints also limit the agency's ability to obtain contract services.

Employee Turnover

Although the agency's turnover rate has fluctuated across a 10-year period (see Figure F.10), it consistently remains below the statewide rate, which, in fiscal 2007, was 17.4 percent. The loss of experienced, talented employees is costly and affects the agency's ability to fulfill its mission and goals and to function at maximum efficiency. In spite of the slight increase in fiscal 2007, the TCEQ enjoys one of the lowest turnover rates among state agencies. See figures F.11 and F.12 for additional information about the tenure of the TCEQ workforce.

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 F.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.

With demographers anticipating a declining workforce as "Baby Boomers" retire and smaller qualified labor pools emerge, 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 mentor and impart knowledge to their potential successors. Such initiatives will enable the agency to both develop and retain skilled employees.

Competition for younger workers trained in disciplines such as science and engineering will become

Figure F.5. Black Population

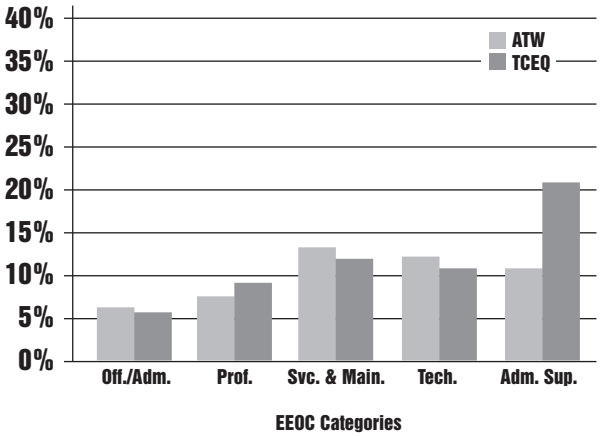
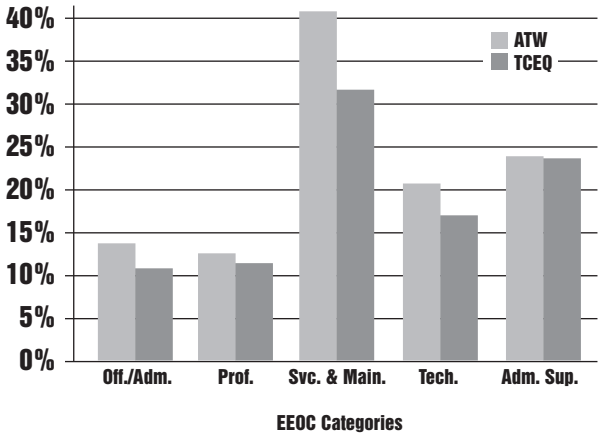


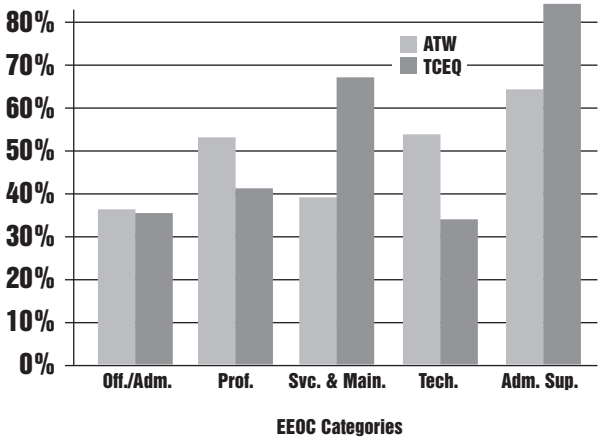
Figure F.6. Hispanic Population



severe in the marketplace. Certain occupations will continue to be hard to fill due to the uniqueness of their requirements. Network and computer systems analysts and administrators, software engineers, and database administrators still maintain a high profile as fast-growing occupations in Texas and elsewhere (according to the Labor Market and Career Information Division of the Texas Workforce Commission). These occupations require high levels of education and skills while also commanding higher wages.

The predominant occupations at the TCEQ have been identified by the Bureau of Labor Statistics as having faster-than-average job growth. The occupations of environmental engineer, scientist, and hydrologist, as well as geoscientist, will experience increased growth over the next five to ten years. In fact, the need for energy, environmental protection, and responsible land and water management will drive a high employment demand. The requirement to comply with complex environmental laws and regulations, as well as increased demands on environmental resources by population growth, will also raise the necessity for these professions. There will also be a strong boost in accountant and auditor occupations due to stricter regulations and economic growth. The agency will strive to remain competitive with other government agencies.

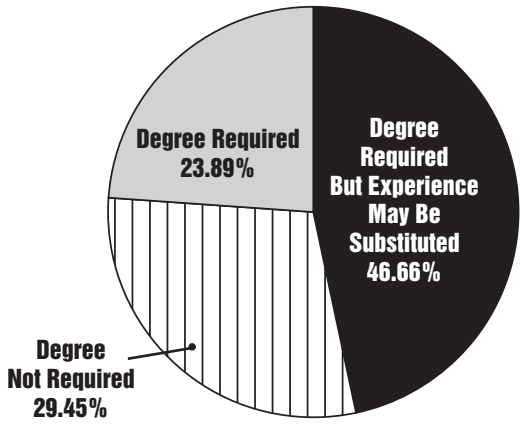
Figure F.7. Female Population



Gap Analysis

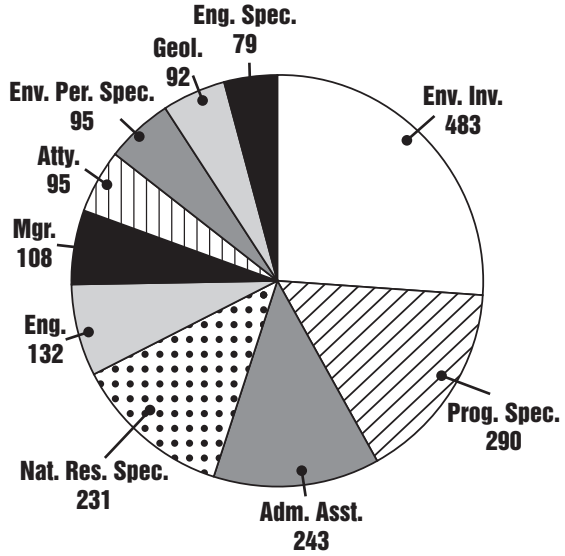
Each office within the TCEQ analyzed the anticipated need for each skill cluster and the possible risk associated with the skill becoming unavailable over the next

Figure F.8.
Education Requirements of TCEQ Employees



Data Source: Human Resources Information System, as of 8/31/07.

Figure F.9.
Population at the TCEQ by Job Classification Series, FY 2007



Data Source: Human Resources Information System, as of 8/31/07.

five years. The results of this "gap analysis" are shown in Table F.4. Each skill is labeled as "low," "medium," or "high" risk, reserving the "high" designation for those gaps more likely to require action. According to this assessment, the most significant gap risks are associated with the following workforce skills: Information Management, Technical Knowledge, Management/ Leadership, Project Management, and Communication.

Strategy Development

The TCEQ anticipates implementing key strategies, which are discussed in the following sections, to address expected skill gaps. Figure F.13 shows the strategies that were identified by agency offices. As in past assessments, Training/Mentoring and Hiring/Re-hiring will be used most often to ensure that the TCEQ

Table F.3. Critical Workforce Skill Clusters Within 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 office**)
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
People 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

LEGEND

COMM – Office of the Commissioners
EXEC – Office of the Executive Director
CEO – Chief Engineer's Office
OLS – Office of Legal Services
OCE – Office of Compliance and Enforcement
OAS – Office of Administrative Services
OPRR – Office of Permitting, Remediation, and Registration

Table F.4. Critical Skills Checklist and Gap Risk Analysis

Skill Category	Skill	COMM	EXEC	CEO	OLS	OCE	OAS	OPRR
Problem solving	Analysis			Med				
	Critical thinking	Med						
	Decision making	Med						Med
	Innovation			Med				
	Other							
Information management	Database development, management, and integration					**High**		Med
	Software proficiency: Java, ColdFusion, Prophecy, TRACS, Ingres, Ingres Open Road, Crystal Enterprise (BOEXI), GIS			Med			**High**	
	Web development and maintenance							Med
	Web development and maintenance (CMS): Technical writers, Web administrators, Web content developers						**High**	
	Computer-assisted tools	Med		Med				Med
	Graphic design							
	Electronic reporting			Med		**High**		Med
	Other							
Technical knowledge (may be unique to a certain office)	Agency policies, procedures, and programs	**High**		**High**		**High**		Med
	Local, state, and federal laws, rules, and regulations	**High**		Med		Med		
	Specialized technical knowledge	Med					**High**	
	Specialized technical knowledge: Environmental science, engineering, and air, water, and waste programs			**High**		**High**		**High**
	Policy analysis and development	Med		**High**		**High**		
	Statistical analysis	Med		Med				
	Regulation analysis and development	Med		**High**		Med		
	Technical analysis	**High**		Med		Med		**High**
	Research							
	Litigation							
	Auditing	**High**						
	Inventory management							
	Other: Financial analysis			Med				
	Other: New skills related to new technology					Med		

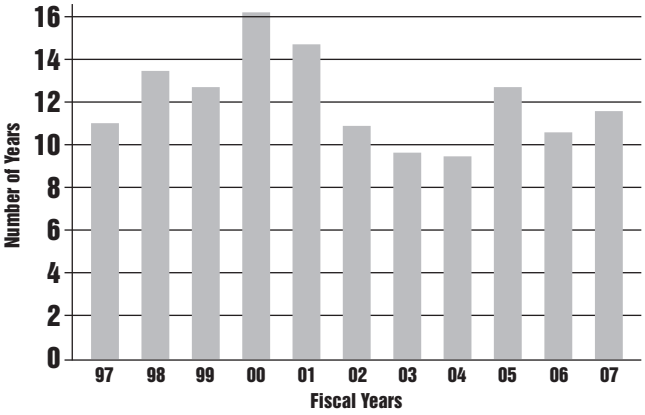
continued on next page

Table F.4. Critical Skills Checklist and Gap Analysis (continued)

Skill Category	Skill	COMM	EXEC	CEO	OLS	OCE	OAS	OPRR
Project management	Organizing	Low		Med				
	Planning	Low		Med				
	Managing multiple priorities	Low		Med				Med
	Quality analysis and process improvement	Low		Med				**High**
	Coordination	Low		Med				
Communication	Written – composition and editing	Med				Med		Med
	Verbal – public speaking and presentation	Med				Med		
	Interpersonal sensitivity	Low		Med				
	Translating technical information into layperson's terms	Low		Med			**High**	
	Teamwork	Low						
	Marketing and public relations	Low		Med				
	Customer service	Low						
	Other: Public participation			Med				
Management/ Leadership	People skills							
	Performance management	Med		Med				
	Strategic planning	Med						**High**
	Conducting training							
	Mentoring			Med		**High**		Med
	Meeting planning/facilitation	**High**						
	Contract management			Med		Med		
	Grant management			Med		Med		
	Financial management	Med		Med		Med		
	Delegation	Med						
	Other							
Administrative/ Support	Word processing							
	Tracking and record keeping	Med						
	Mail processing	Med						
	Other							
Other Skills	Other							

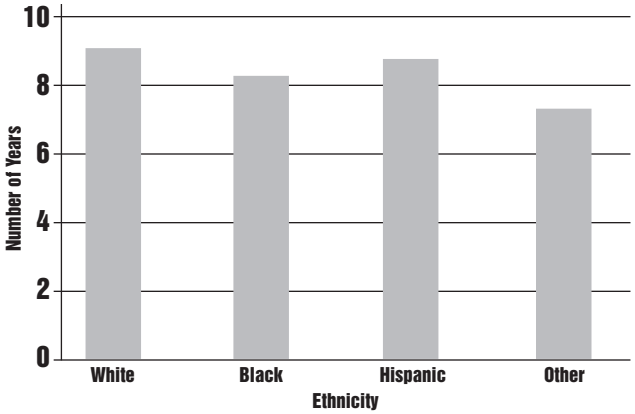
continues to have the right people with the right skills in the right job to fulfill the agency's core functions. However, during this same period, Retention Efforts is indicated as another key strategy for addressing anticipated skill gaps. This points to an awareness within the agency that it is important to retain existing staff to lessen the risk of losing critical knowledge and skills that are difficult to replace. Additional efforts can be placed on improving documentation, increasing the use of existing technology, and making staff allocation changes to ensure that the right people with the right skills are in the right job.

Figure F.10.
TCEQ Employee Turnover Rate, FYs 1997–2007



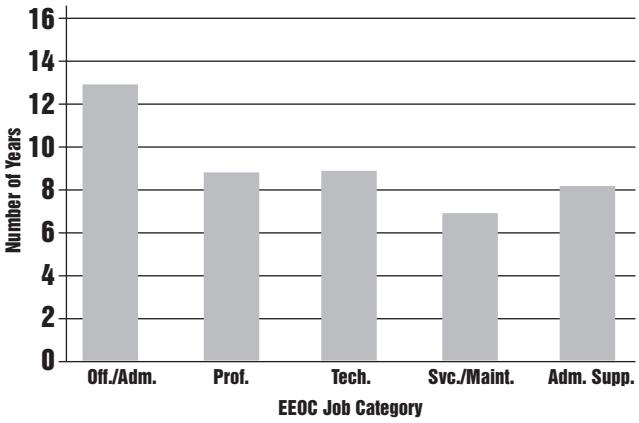
Data Source: Human Resources Information System, as of 8/31/07.

Figure F.11.
TCEQ Employee Tenure, by Race



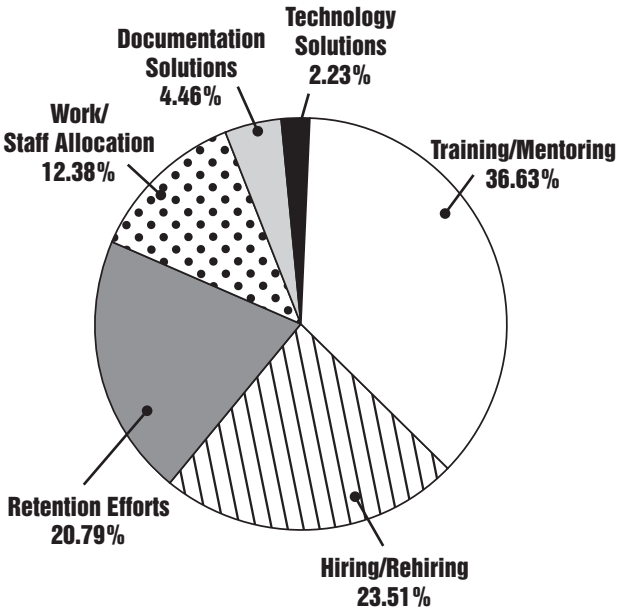
Data Source: Human Resources Information System, as of 8/31/07.

Figure F.12.
TCEQ Employee Tenure, by EEOC Job Category



Data Source: Human Resources Information System, as of 8/31/07.

Figure F.13.
Strategies to Address Skill Gaps



Data Source: Human Resources Information System, as of 8/31/07.

Training and Mentoring

More than ever, job shadowing and cross-training are emerging as solutions to enhancing critical workforce skills. Employees may be assigned to shadow experienced staff and subject-matter experts on special projects in order to develop and sharpen specific skills. Senior staff are increasingly relied on to cross-train less experienced employees. Staff also continue to participate in online, on-the-job, and classroom training. An increased investment in training may be required to address the need for well-trained and skilled employees.

One strategy for preparing the agency's existing workforce for future leadership positions is the Aspiring Leaders Program. This program is designed to provide non-supervisory staff with access to training and development opportunities that will help prepare them for possible succession into management positions. The development and promotion of in-house talent will be essential for long-term mission objectives.

Hiring

Hiring authorities plan to seek approval to hire above the minimum rate of a salary group. Offices plan to request approval to hire retirees, not only to provide needed expertise in the short term, but to allow managers more opportunities to transfer needed skill sets from veteran employees to less experienced staff. The transfer of institutional knowledge ensures continuity of agency functions and is a dynamic process.

Emphasis will continue on recruitment to encourage a diverse, qualified applicant pool to seek employment with the TCEQ. The agency continues to partner with outside entities–such as colleges, universities, and other organizations–to provide options for meeting hiring needs.

Hiring supervisors may utilize the Express Hire program, which allows hiring supervisors to identify and hire qualified applicants for job vacancies on the spot at recruiting events. They can also highlight the generous benefits package and employee programs available at the agency, such as medical insurance, leave benefits, flextime work schedules, and employee wellness programs.

Retention Strategies

Strategies to retain individuals who possess essential skills include providing opportunities for increased responsibility (promotions), granting merit increases to reward performance, and using employee recognition programs. The TCEQ should continue to provide developmental opportunities for employees to focus on critical skills, competencies, and technical requirements needed by the agency. This can lead to enhanced career and professional development opportunities. We may also see increased reliance on flextime/alternative work hours and tele-working to provide managers with ways to retain today's more flexible, mobile workforce.

Work/Staff Allocation Changes

Managers are seeking innovative ways to allocate work and for staff to maintain or improve skill sets. Some are choosing to restructure jobs, revise functional job descriptions, involve subordinates in higher-level decision making, or assign backups to every position, while also including these backup responsibilities in their performance plan. Managers are also looking at ways to redesign processes, streamline operations using technology, and improve efficiencies to lessen the risk of losing specialized skill sets.

Documentation and Technology Solutions

Managers throughout the agency have increased requirements for documenting job standards, operating processes and procedures, and policy development decisions in an attempt to reduce the risk of knowledge/skill loss. This documentation helps newer employees understand the best practices of their predecessors and to guide future decision making. Managers are seeking ways to make the most of new and existing technological resources in this area. Management may request approval to upgrade existing systems and to purchase new technology, such as computer-assisted tools.