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# Biennial Report to the 79<sup>th</sup> Legislature FY 2003–FY 2004



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## Report Status

*The Biennial Report to the Legislature* is published every December before a regular legislative session, as required by the Texas Water Code, Section 5.178. This year's report contains other information required by law:

- Agency research efforts, page 8. This information was last published in December 2002 in the *Biennial Report to the 78<sup>th</sup> Legislature*, SFR-057/02.
- Waste exchange results (RENEW), page 15. This information was last published in December 2002 as SFR-054/02, a separate appendix to the *Biennial Report to the 78<sup>th</sup> Legislature*.
- Assessment of complaints received, Appendix, page 21. This report was last issued in December 2002 as SFR-076/02, a separate appendix to the *Biennial Report to the 78<sup>th</sup> Legislature*.

Certain previous reports that were issued as separate appendices to the *Biennial Report* are no longer required. Those covered the following topics: needs assessment for commercial management capacity of hazardous waste, needs assessment for industrial Class 1 nonhazardous waste commercial disposal capacity, used oil recycling, pollution prevention, and low-emission vehicles and alternative fuel use.

# From the Commission

The TCEQ is a large, complex agency. What we do, and how we do it, involves and affects every resident of the state. As TCEQ commissioners, we approach our jobs with the fundamental tenet that we are the humble servants of the people of Texas. This belief influences every decision we make, and points us toward continually striving to improve how we perform our critical mission.

Consistent with that belief, we have undertaken a number of initiatives that will impact planning and operations for years to come. These steps will literally change how we do business and will help ensure that our programs are effective, efficient, just, and responsive to the needs of all Texans.

One initiative will improve how we collect and use vital information on environmental conditions. The Environmental Monitoring and Response System (EMRS) will detect and react to air and water pollution on a real-time basis. Through a pilot project, the agency is testing a system near the Houston Ship Channel that notifies industry as soon as troublesome air patterns appear. Industry then can react before serious pollution forms. A parallel pilot project with water pollution near Waco is under way, too. Our ultimate goal is to deploy a permanent system that will allow us to more rapidly convert data to knowledge and action, as well as put information in the hands of those who need it the most—the public.

In another culture change, we have looked internally at our enforcement process in a top-down, comprehensive review. We scrutinized everything—from how we initiate enforcement to use of compliance history. As a result, the commission will implement meaningful changes to ensure that the enforcement process is swift, fair, and effective.


In addition, the TCEQ is dealing with major regulatory challenges. New, more stringent air quality pollution standards must be met in some urban areas, starting in 2007. Tougher drinking water standards could affect several hundred water suppliers. Work is under way to rewrite rules governing municipal solid waste landfills. And the agency will begin the process of licensing a proposed low-level radioactive waste disposal facility.

Meanwhile, there is good news to report. El Paso has monitored compliance for three different air pollutants that once posed problems, and Texas has been declared in compliance of the federal standard for “fine” particulate matter, or PM<sub>2.5</sub>.


We are excited at finding new opportunities. Every year, we continue to enhance existing public-private partnerships and to create new ones. In doing so, we can achieve better efficiencies with existing resources. By making better use of existing technology and knowledge, we can further environmental protection. The TCEQ looks forward to the many challenges that lie ahead.



Kathleen Hartnett White, Chairman



R.B. “Ralph” Marquez, Commissioner



Larry R. Soward, Commissioner

## Introduction to the TCEQ

The Texas Commission on Environmental Quality (TCEQ) is the environmental agency for the state. The TCEQ has about 3,000 employees, 16 regional offices, and a \$464.4 million operating budget for the 2004 fiscal year. Most of the budget is funded by fees: 79.8 percent. Federal funds provide 9.8 percent; state general revenue provides 5.9 percent; and other sources provide the remaining 4.5 percent.

## Mission Statement

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.

## Agency Philosophy

To accomplish our mission, we:

- 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; and
- hire, develop, and retain a high-quality, diverse workforce.

# Chapter One

## Environmental Programs Break New Ground

The Texas Commission on Environmental Quality is the primary environmental agency for the state, with responsibilities spanning the areas of air quality, water quality and quantity, and waste management. The agency has made major strides toward meeting its environmental goals during the last two fiscal years.

The State Implementation Plan for addressing air emissions has been adopted and features a number of innovative measures that will enable metropolitan areas to meet their federal deadlines for air quality compliance. Beaumont-Port Arthur was the first metropolitan area in the United States to submit an attainment demonstration for the new, tougher 8-hour ozone standard. To help areas that are near nonattainment for ozone, the TCEQ, in partnership with the Environmental Protection Agency (EPA), local officials, and environmental groups, created the concept of Early Action Compacts. In this initiative, local communities work with state and federal environmental officials to address air quality issues and to avoid the issuance of mandatory regulations. Now, the program has been embraced by EPA and is being implemented nationwide.

The TCEQ has a number of success stories to tell. From a cutting-edge program monitoring air and water quality to the use of economic incentives to reduce diesel emissions, the agency has demonstrated in many ways that it remains on the forefront of implementing and managing environmental programs. These endeavors are carried out in partnership with other agencies and organizations, and with the involvement and participation of stakeholders.

The topics contained in this report reflect some—but not all—of the important programs of the TCEQ. These agency activities took place in fiscal year 2003 (September 1, 2002, to August 31, 2003) or in fiscal year 2004 (September 1, 2003, to August 31, 2004).

### INITIATIVES

#### Faster Detection, Action

The TCEQ underscored its leadership in environmental management with an innovative approach to monitoring air and water quality.

In the summer of 2004, the agency unveiled a pilot program that could yield major improvements in the collection and reporting of environmental data. This advancement will help to accelerate the conversion of data to knowledge to prevention.

With creation of the Environmental Monitoring and Response System (EMRS), the TCEQ can study incoming data, then alert potentially contributing sources to implement corrective actions in advance of air pollution events. An air quality pilot project was launched in Harris County in June 2004, and a project for water quality monitoring began several months later near Waco.

Thanks to current technology, near real-time data can be sent to the agency—in as little as 15 minutes after collection—when significant changes occur in the environment. Changes in air chemistry, for example, might signal a release of pollution from an industrial complex—emissions that could begin feeding the formation of ozone. Similarly, incoming surface water data might point to a local creek or river at which pollution has originated.

**Air Quality.** With the air monitoring project, the TCEQ and participants in the Houston Regional Monitoring Network share

the monitoring equipment and the resulting data. The focus is on industrial plants along the Houston Ship Channel and the emissions of highly reactive volatile organic compounds (VOCs), which contribute to rapid escalation of ozone.

When certain conditions develop, the TCEQ headquarters in Austin, in conjunction with the network, notifies the Houston regional office and all industrial sources within a 10-mile radius upwind of the monitor that registered high readings. With this early notice, industry can move quickly to correct potential causes.

**Water Quality.** The TCEQ's oversight of water quality includes eight continuous, automated stations in several river basins around the state that measure for pollutants and adverse conditions. The EMRS pilot project is concentrated in the North Bosque and Leon watersheds, northwest of Waco, where runoff from large-scale dairies in the area has been identified as a major source of phosphorus. The resulting algae can deplete a water body of needed oxygen and cause odor and taste problems in drinking water.

At two sites in the Bosque watershed and two more in the adjoining Leon watershed, readings are taken every 15 minutes for dissolved oxygen, pH, conductivity, and temperature. And with new nutrient monitors, additional information on nitrate, ammonia, and reactive phosphate is recorded every one to six hours. Two upstream sites take readings every 15 minutes for

water flow and precipitation. All the data is transmitted to the TCEQ by modem, satellite, or a combination of radio and landline. Unusual patterns detected in water quality data can trigger investigations upstream to determine what may be causing the problem.

### Clear Streams Initiative

In the spring of 2004, the TCEQ launched an investigation into the operations of rock mining facilities in Texas. The action came in response to outside queries and concerns over the mining of stone, sand, and gravel near bodies of water.

With the regulatory responsibility for storm water runoff, the TCEQ investigated sites in 62 counties known to have a high density of rock mining facilities operating near waterways. The areas of concern were in and around Abilene, Dallas, Fort Worth, Waco, Austin, Houston, and San Antonio.

The campaign, called the “Clear Streams Initiative,” involved 316 sites: 164 with permits, and 103 sites that were found to have no permits. At the remaining sites, the agency determined no storm water permits were required.

As a result of the initiative, staff documented 72 operational violations and 138 administrative violations. The most common violations were making unauthorized discharges, lacking adequate best management practices, and failing to monitor as required by permit. Of the 72 operational violations, 19 directly impacted environmental conditions on Texas waterways.

As of August 31, 2004, the agency had issued 128 notices of violation and 38 notices of enforcement with pending orders. In addition, the Texas Attorney General’s office had obtained three temporary restraining orders, and was developing two temporary injunctions and one enforcement case to recover penalties and attorneys fees.

The Clear Streams Initiative continued in fiscal year 2005 with additional investigations and follow-up visits to rock mining sites. Also, the agency began developing a new general permit for sand and gravel operations.

### Enforcement Process Undergoes Review

The TCEQ spent much of fiscal year 2004 conducting a comprehensive examination of its enforcement functions. Staff delved into all aspects of the compliance and enforcement operations.

The internal review was guided by certain key principles, such as simplifying enforcement procedures, ensuring consistency across the regions and agency programs, and using enforcement policies to maximize compliance and get the greatest environmental benefits. Another important factor was the impact of enforcement functions on small businesses.

Three broad areas served as the focus of the review:

- Compliance history, including the program’s definitions, classifications, and use of ratings.
- Steps of the enforcement process, including complaint procedures, initiating cases, and collection of delinquent penalties.
- Penalty policies and corrective actions, including technical recommendations and the use of supplemental environmental projects (SEPs).

The review examined ways to clarify the enforcement process and to expand the public’s access to agency enforcement information. This brought up the need for more public outreach so that Texans better understand how to report environmental complaints.

One primary task was finding ways to sharpen the agency’s focus on preventing and eliminating any possible risk to human health and the environment. This could mean assigning additional agency inspection and enforcement resources to violations causing harm or having the potential to do so.

The public was invited to comment on the enforcement process through public meetings, questionnaires, and Web postings.

The commissioners planned to reach their final recommendations by the end of 2004.

The draft report and recommendations can be read at [www.tceq.state.tx.us/comm\\_exec/enf\\_rev/index.html](http://www.tceq.state.tx.us/comm_exec/enf_rev/index.html).

### Permitting Examination

In line with its responsibility to protect human health and the environment, the TCEQ issues permits and other authorizations for the control of air pollution, the management of hazardous and nonhazardous waste, and the safe operation of water and wastewater utilities.

Receiving more than 8,200 environmental permit applications a year, the TCEQ has examined its permit processing and the reasons why some projects take longer to process than others.

The length of time needed to process a permit—and to determine whether it should be granted—depends on the complexity of the project and the type of permit sought. Staff conduct an administrative review to determine whether the application is complete, then initiate a technical review to assess the potential impact of the proposed operations on the environment and nearby communities.

In fiscal year 2002, the agency began accelerating the review of pending applications. With creation of the Permit Time-Frame Reduction Project, staff evaluated how long it should take to complete permit processing in a timely fashion. The agency then developed a range of estimates that became the time frames targeted for processing permits.

In the first year of the project, there was a major push to focus agency personnel and resources on this issue. As a result, an accumulation of 1,120 permitting cases was cut to only 100. Even with that reduction, staff continued to analyze internal procedures and identify additional ways to be efficient. As of August 2004, 85 percent of the applications were meeting the TCEQ permit time-frame targets.

### Electronic Reporting

In its role to implement state and federal environmental laws, the TCEQ requires different reports from various entities whose activities affect air quality, water quality, or waste management. From tens of thousands of individual reports collected each year, the agency accrues massive amounts of data.

For years, staff worked to design and build a common infrastructure for electronic reporting. The debut of the Web version of the State of Texas Environmental Electronic Reporting System (STEERS) provided the foundation for filing reports on the Internet.

In fiscal year 2003, the agency began accepting Internet reports of “emission events,” which are air upsets and maintenance activities that occur at industrial plants. STEERS provides companies a timely method of submitting reports and verifying that agency-held data are accurate before being made public. Among the other reports the TCEQ receives online are: industrial hazardous waste monthly receipt summaries and notice of registration updates, petroleum storage tank self-certifications, and storm water general permits for construction.

Now, a new application called “ePay” gives customers the capability to pay many fees electronically by credit card or electronic funds transfer. This allows for nearly all TCEQ invoices to be payable online, as well as a number of noninvoiced fees, such as permit fees. Of the estimated 82,000 eligible transactions expected in fiscal year 2005, the TCEQ anticipates that about 20 percent will be paid electronically.

The TCEQ also helped establish a “natural resources” portal at Texas Online, a Web site that makes many government services available to Texans 24 hours a day. At [www.texasonline.com](http://www.texasonline.com), consumers and businesses can quickly locate and gain access to select environmental information and services provided by the state.

Along with developing programs for online submissions, the agency has been involved in addressing security concerns. It is important that reports submitted electronically be as binding and enforceable as paper reports. Also, protecting users’ data during transmittal and storage is vital.

Electronic reporting has made it easier for the regulated community to do business with the agency, and the public has gained better access to information collected. At the same time,

the agency saves on resources and improves the quality and timeliness of its data.

## ENFORCEMENT

### Focus on the Environment

Investigations and enforcement are vital tools in addressing environmental problems.

At the same time, the TCEQ also promotes voluntary compliance through pollution prevention programs, regulatory workshops, and assistance to businesses and local governments.

But when environmental laws are violated, the TCEQ has the authority to levy penalties—as much as \$10,000 a day per violation for administrative cases and \$25,000 a day per violation in civil judicial cases.

In a typical year, the agency investigates more than 70,000 regulated entities for compliance with environmental laws and responds to 5,000 to 6,000 complaints.

In fiscal year 2003, the TCEQ issued 955 administrative orders, which yielded \$5.4 million in fines and \$1.8 million directed toward SEPs.

With SEPs, the violator agrees to contribute all or part of the administrative fine to an environmental project in the community where the violation occurred.

In fiscal year 2004, the TCEQ issued 761 administrative orders, which yielded \$5.6 million in fines and directed \$2.4 million toward SEPs.

The TCEQ also can refer cases to the Attorney General. In fiscal year 2003, the AG’s office obtained 38 judicial orders in cases referred by the TCEQ or in which the TCEQ was a party. Those orders resulted in \$16.8 million in civil penalties and another \$1.6 million directed to SEPs.

In fiscal year 2004, the AG’s office obtained 37 judicial orders, which resulted in \$311 million in civil penalties. No judicial orders included SEPs.

The TCEQ’s latest annual enforcement report is posted online. Visit [www.tceq.state.tx.us/nav/cec/enforcement.html](http://www.tceq.state.tx.us/nav/cec/enforcement.html).

### Compliance History

One component of the agency’s enforcement function is the use of compliance history ratings.

As a result of legislation in 2001, the TCEQ developed and implemented a uniform standard for evaluating compliance history, as well as a performance classification system to rate the 216,000 entities the agency regulates. (These are the entities that statute requires to be classified.)

The ratings take into consideration prior enforcement orders,



## Compliance History Designations August 2004

The classifications in this program are updated each September to reflect the previous five years. “Average by default” means there was no information on which to base a rating because the entity was new, or there was no agency action the previous five years.

Entity Classification	Number	Percent
High	35,131	16.2%
Average by default	149,876	69.4%
Average	28,945	13.4%
Poor	2,149	1.0%
<b>TOTAL</b>	<b>216,101</b>	<b>100%</b>

court judgments, consent decrees, criminal convictions, and notices of violation.

The TCEQ spent most of fiscal year 2002 developing the rating system, then classifying each regulated entity to distinguish among “high,” “average,” and “poor” performers. An entity’s classification now comes into play when the agency considers matters regarding not only enforcement but also permit actions, the use of announced inspections, and participation in innovative programs.

In September 2002, the commissioners began using compliance history classifications in their regulatory decision making.

In most of its regulatory programs, the agency—using the uniform standard—evaluates the compliance history of each regulated site, and classifies each site and customer in accordance with a formula established by rule. A compliance history report shows the information used to determine the site rating. A database of ratings is available on the agency’s Web site at [www.tceq.state.tx.us/nav/cec](http://www.tceq.state.tx.us/nav/cec).

Ratings below 0.10 receive a “high” classification, which means those entities have an “above average compliance record” with environmental regulations. Ratings from 0.10 to 45.00 merit “average” for having “generally complied.” And ratings of 45.01 or more result in a “poor” classification because these entities “performed below average.”

An “average by default” classification means there was no compliance information on that entity for the last five years.

### Complaints Received

By law, the agency is required to prepare a compilation of the environmental complaints received each year, including analyses of complaints from several perspectives—by environmental media (air, water, and waste), priority classification, region, commission

response, enforcement action, and trends. The agency also is required to assess the impact of changes made in the complaint policy.

The analyses of complaints received in fiscal years 2003-2004 can be found in the Appendix of this report.

## AIR QUALITY

### Meeting the Ozone Challenge

Texas faces some of the most difficult air quality challenges in the country. One of the major pollutants that must be reduced in Texas is ozone.

EPA has established two standards for ozone. The 1-hour ozone standard was set in the 1970s. A metropolitan area violates this standard when the highest 1-hour reading of the day at any one monitor equals or exceeds 0.12 parts per million (ppm) more than three times during any consecutive three-year period.

In 1997, EPA developed an 8-hour ozone standard, which is based on the average value of readings taken over 8-hour periods.

A metropolitan area violates this standard when the three-year average of each year’s fourth-highest daily maximum 8-hour ozone concentrations equals or exceeds 0.08 ppm.

Implementation of the 8-hour standard was delayed by a legal challenge. However, the U.S. Supreme Court upheld EPA’s authority to develop the new health-based standard.

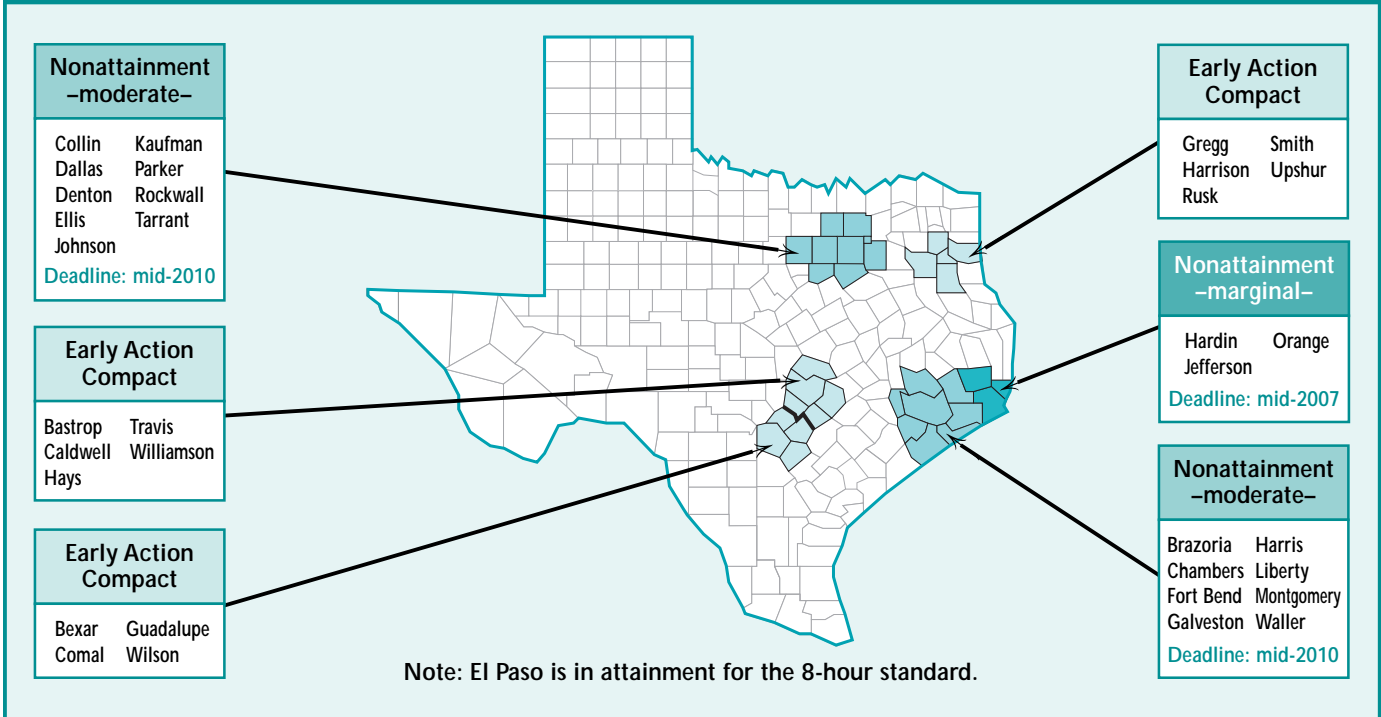
To encourage early compliance with the 8-hour ozone standard, the TCEQ—in partnership with EPA, local communities, environmental groups, and other stakeholders—developed the Early Action Compact (EAC) program.

Under this innovative program, which EPA is now implementing nationwide, metropolitan areas that were in attainment of the 1-hour standard but approached or exceeded the 8-hour standard were eligible to participate. In exchange for a formal agreement to come into compliance with the 8-hour standard by the end of 2007, an area could be designated “nonattainment deferred,” thereby avoiding certain mandatory regulations, such as emission offsets, that apply to nonattainment areas.

In Texas, seven metropolitan areas have been designated as nonattainment for one or both of the ozone standards, either as

**G**round-level ozone, a component of smog, is formed when pollutants emitted by cars, power plants, industrial refineries, chemical plants, trees and plants, and other sources react chemically in sunlight. Nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) are the leading ozone precursors. The TCEQ issues daily ozone forecasts due to the health concerns associated with breathing the pollutant.

## County Designations for 8-Hour Ozone Standard



traditional nonattainment areas, or as participants in an EAC (see map for county designations and compliance deadlines for the 8-hour standard). These areas are all taking major steps toward coming into compliance with the 8-hour standard. Strategies have been adopted that will bring all of these areas into attainment with the 1-hour standard by 2007.

All of the pollution control measures are spelled out in the State Implementation Plan (SIP), which is a blueprint for reaching compliance with federal air quality standards.

The SIP provisions are rigorous, but were crafted to address the individual needs of each metropolitan area experiencing air quality problems.

The urban areas in nonattainment for the 1-hour standard already had a number of stringent control measures in place. For example, vehicle emissions testing using updated technology has been required as part of annual safety inspections in the Houston and Dallas-Fort Worth areas since 1997.

The 8-hour ozone standard, which is now in effect, will replace the 1-hour standard, as of June 2005.

An area-by-area update of the SIP follows:

- **Beaumont-Port Arthur.** The Beaumont-Port Arthur area was the first metropolitan area in the country to submit an attainment demonstration for the 8-hour ozone standard. The TCEQ has adopted a SIP plan for the area that demonstrates attainment of the 1-hour standard by 2005 and the

8-hour standard by 2007. This major success is due to the hard work and collaboration of local officials, environmental groups, and industry. These groups came together to ensure the area would meet its air quality goals.

- **El Paso.** El Paso is another major success story. As discussed later in this chapter, El Paso currently meets all of the federally required air quality standards. The TCEQ is moving forward with a maintenance plan for ozone and a redesignation request for carbon monoxide.

- **Houston-Galveston.** Scientific findings have demonstrated that, in addition to nitrogen oxide (NO<sub>x</sub>) reductions, controlling highly reactive VOCs from industrial sources is the most effective means of reducing ozone in this region. Toward this end, the agency proposes to create an annual cap-and-trade program to reduce these emissions from process vents and cooling tower heat exchangers. The TCEQ submission to EPA includes photochemical modeling and other evidence demonstrating the area will attain the 1-hour standard, and that doing so will not interfere with progress toward achieving the 8-hour standard. With the science demonstrating that the current strategy is the most effective, the TCEQ was able to eliminate some regulations in the area. The agency removed Chambers, Liberty, and Waller counties from yearly vehicle inspections for air emissions. Also, restrictions were lifted on lower speed limits and on lawn service equipment.

- **Dallas-Fort Worth.** Upon issuing the nonattainment designations for the 8-hour standard, EPA expanded the Dallas-Fort Worth area to include five new counties—for a total of nine. Added were the counties of Ellis, Johnson, Kaufman, Parker, and Rockwall. For this metropolitan area, the TCEQ, EPA, and local officials have chosen an option designed to achieve by 2007 a 5 percent reduction in emissions from 2002 levels. This SIP revision is due to EPA in June 2005. The TCEQ is working with EPA and local stakeholders to finalize the next step—demonstration of attainment in 2010.
- **Early Action Compact areas.** Fourteen counties have volunteered to enter EACs. The San Antonio area was designated by EPA as nonattainment-deferred, meaning it will not be subject to the requirements of a nonattainment area as long as it meets certain voluntary commitments. In this EAC, the four counties pledged to undertake a variety of measures to reduce ozone levels and to achieve agreed-upon milestones. The other EACs—in Central Texas and Northeast Texas—were in attainment of the 8-hour standard at the time of EPA’s designations in 2004, so the control measures to which they had agreed should help them stay in compliance. All three EAC areas have proposed pollution-reduction strategies that are tailored to their own emissions problems. The Austin area plans to institute car and truck inspections for excess emissions, starting in 2005. The San Antonio area expects to require Stage I vapor recovery at most gasoline stations to recover emissions from tanker deliveries. In Northeast Texas, several large industrial plants in the Longview-Tyler area have volunteered to reduce NO<sub>x</sub> emissions through measures such as leak detection and repairs.

One measure adopted under the SIP will affect the entire state. Under this proposal submitted to EPA, only gas can containers and spouts that are spill proof will be sold, starting in December 2005. The new design limits the emissions of VOCs when portable containers are used for filling lawn care equipment. It

also prevents fuel spillage, which then might end up in a storm drain or an underground water supply.

### Incentives Program in High Gear

Under the Texas Emissions Reduction Plan (TERP), grants are being made available to help several urban areas achieve their goals in air improvement. Fully funded since fiscal year 2003, the TERP is focusing on voluntary ways to reduce NO<sub>x</sub> emissions through economic incentives.

In fiscal years 2003-2004, the program awarded a total of \$43.9 million in grants for 141 projects. An additional 136 applications, representing \$76 million, were selected for funding in fiscal year 2004. Contracts for these grants were processed after August 31, 2004.

These TERP grants are projected to reduce NO<sub>x</sub> emissions by 17,050 tons through 2007.

The program targets heavy-duty vehicles, stationary equipment, and large nonroad equipment, such as construction equipment, locomotives, and marine vessels.

TERP funding supports the state’s economic incentives for the Dallas-Fort Worth and Houston clean air plans. Also, the Austin and San Antonio areas have committed in their EACs to obtaining emission reductions through this program.

In August 2004, the commissioners approved specific funding allocations for each area that is eligible for TERP funds. This approach will maximize the program’s benefits to the SIP by achieving the needed NO<sub>x</sub> reductions.

The TERP grants and activities are detailed in a separate report called the *Texas Emissions Reduction Plan: Report to the Texas Legislature*, SFR-079/04. More information is available at [www.terpgrants.org](http://www.terpgrants.org).

### Curbing Car and Truck Emissions

The vehicle emissions testing program, known as AirCheckTexas, has been working since 2002 to reduce tailpipe emissions that contribute to ozone formation. The program began in Harris, Dallas, Denton, Collin, and Tarrant counties, then expanded in 2003 to nine more counties. The emissions testing is

## Vehicle Emissions Testing in 15 Counties

Fiscal Year	Number of Certified Inspection Stations	Number of Vehicles Inspected	Number/Percent of Vehicles Passing First Test	Number/Percent of Retested Vehicles Passing
2003	2,709	5.0 million	4.5 million / 91.1%	322,638 / 70.4%
2004	2,982	5.9 million	5.5 million / 93.0%	336,765 / 75.2%

now a part of annual vehicle safety inspections in the counties of Ellis, Johnson, Kaufman, Parker, and Rockwall in the Dallas-Fort Worth area; and Galveston, Brazoria, Fort Bend, and Montgomery in the Houston area. In addition, El Paso County has operated an emissions testing program since 1987.

AirCheckTexas, which is run jointly by the TCEQ and the Texas Department of Public Safety, applies to gasoline vehicles that are 2 to 24 years old. Car and truck model years 1996 or newer undergo an on-board diagnostics test, in which a scan tool plugs into the vehicle's computer and downloads stored information to identify emission systems or components that are not working properly. The test monitors for a malfunction or deterioration of components that control exhaust emissions.

Vehicle model years 1995 or older are put through the acceleration simulation mode, which simulates actual driving so that tailpipe emissions can be more accurately measured. A dynamometer accelerates the engine up to 25 mph while instruments measure emissions—in particular, hydrocarbons, carbon monoxide, and NO<sub>x</sub>.

A third method, the two-speed idle test, is used with vehicles too large (8,500-plus pounds) for the dynamometer or those with only four-wheel drive. Also, this is the sole test used in El Paso.

Financial help was available to motorists who could not afford to repair or replace their vehicles. In fiscal years 2003-2004, the AirCheckTexas Repair and Replacement Assistance Program received requests from more than 14,000 vehicle owners. Of those, 11,387 vehicle owners qualified to receive vouchers worth an estimated \$5.3 million in repair assistance—about \$469 per recipient. Another 514 owners chose to retire their vehicles because of costly repair estimates, and the state paid a total of \$512,245 toward replacement vehicles—about \$996 per recipient. Fourteen counties participate in the assistance program; El Paso County does not.

Vehicles that failed the first emissions test and subsequent retests were denied re-registration.

## El Paso Achieves Air Goals

In fiscal year 2004, the TCEQ was formulating a plan to seek a redesignation in El Paso's air quality status. That is because El Paso has written its own success story in the way it has addressed three troublesome pollutants. The county has been in compliance with federal standards for carbon monoxide, ozone, and "coarse" particulate matter (PM10) for five years or longer.

That was not always the case. In 1990, El Paso was designated nonattainment for all three pollutants. However, EPA recognized the difficulties associated with El Paso's location next to an international border and the fact that urban air pollution from Juárez drifts into El Paso.

Even so, El Paso government officials have worked to implement a host of control strategies, such as vehicle emissions testing and alternative forms of gasoline, all of which have proved successful.

The TCEQ will move in 2005 to request that EPA consider a redesignation for carbon monoxide and 1-hour ozone. EPA has already classified El Paso in attainment for the 8-hour ozone standard and PM2.5.

## Texas Meets PM Standard

Texas has another success story to tell: "fine" particulate matter is not a pollutant of concern. EPA announced in 2004 that Texas had maintained compliance with the federal standard for PM2.5. But 22 other states were notified that they will probably be found in violation.

Monitoring by the TCEQ showed that all areas of the state were in compliance with the federal standard, based on monitoring data from 2000 to 2002.

Fine particulate matter describes the particles from dust, dirt, and smoke that remain suspended in the air for long periods of time. The particles are so tiny they can only be detected with an electron microscope.

EPA cited health concerns when it established the PM2.5 standard. Medical studies suggest an association with increased respiratory disease, decreased lung functions, and even premature death. The primary sources are vehicle exhaust and industrial fuel combustion.

## Monitoring for Pollutants

Over several decades, the state's air monitoring network has expanded as the population grew, air quality standards changed, and more communities requested or were required to install air quality monitoring. Today, the TCEQ and its air network partners operate ozone monitors in 34 counties, primarily in and around urban areas.

Using some of the best technology available, the Texas air network—representing both public and private ownership—encompasses 189 stations (a single station can contain up to 15 instruments, and a single instrument can collect data on as many as 100 weather or pollutant data types).

The main components of the network are:

- Continuous monitoring stations taking 5-minute average measurements of ozone, NO<sub>x</sub>, carbon monoxide, and other compounds, plus several weather measurements.
- Automated gas chromatographs owned by the TCEQ and industry, which tie into TCEQ computers. This equipment, which separates and identifies 48 to 65 compounds, produces results once an hour around the clock.

- Stations mostly along the Gulf Coast and in urban areas taking canister samples for VOCs. The 24-hour measurements, including those for air toxics and ozone precursors, are routinely collected every six days for lab analysis.
- Noncontinuous PM2.5 filter samplers and automated continuous PM2.5 monitors measuring for microscopic particulate matter, such as soot, smoke, and dust.
- Stations operated by Harris County and the cities of Houston, Dallas, Fort Worth, El Paso, and Victoria, as well as by councils of governments based in Austin, San Antonio, Beaumont, and Longview.

## Environmental Research

The TCEQ draws essential data from scientific research on the emissions, formation, accumulation, and movement of air pollutants, including the meteorological and chemical processes involved. The agency's Sunset bill, passed in 2001, encouraged a cooperative approach to performing this research.

Based on funding levels of \$3.1 million in fiscal year 2003 and \$4.1 million in fiscal year 2004, the TCEQ accomplished many significant research projects to improve the scientific basis for developing the 1-hour ozone standard for the SIP. The projects were conducted in cooperation with a number of organizations, including institutions of higher education (Baylor University, Lamar University, Texas A&M University, the University of Texas at Austin, and the University of Houston), as well as the National Oceanic and Atmospheric Administration, the Southern Oxidant Study, and environmental contractors.

The research projects addressed the following issues:

- Improving the characterization of transport—or movement—of air pollutants. This includes the impact of ozone and precursors moving into the Dallas-Fort Worth nonattainment area.
- Refining air emission inventories, including onroad and nonroad mobile sources, commercial and industrial equipment, and railroad tank cars.
- Providing data through enhanced monitoring and monitoring technologies.
- Increasing knowledge of the formation processes by additional analyses of data collected.
- Researching improvements in characterization of meteorological conditions contributing to the formation and accumulation of ozone and regional haze.

## WATER QUALITY and SUPPLY

### Addressing Surface Water

The TCEQ works every day to protect water quality through

various activities, including the review and issuance of wastewater permits, water quality improvement projects, and educational events. In addition, the agency has a robust program to collect data, assess water quality, and update the public on the status of rivers, lakes, and estuaries. The goal is to keep bodies of water safe for people, fish, and wildlife—and to restore the ones that are impaired.

Every two years, the TCEQ assesses water quality to determine which water bodies meet their designated uses, such as contact recreation, support of aquatic life, or drinking water supply. This effort culminates in the *Texas Water Quality Inventory and 303(d) List*, which describes the status of the state's waters and identifies water bodies not meeting one or more standards for water quality.

The Inventory represents a snapshot of conditions during the assessment period and identifies the status of water bodies in relation to the attainment of standards set to protect their designated uses. The 303(d) List identifies waters that do not regularly attain one or more of those uses.

Because of the large number of river miles, Texas can assess only a small portion of them. The most important river segments and those considered to be at highest risk for pollution are assessed regularly.

The steady progress on assessing more water bodies is seen in the 48 percent increase in the number of stream miles assessed since 1996, when the Texas Clean Rivers Program was established. A collaboration of the TCEQ and 15 regional water agencies, this program leverages resources for monitoring water quality. In 2004, water quality data was collected at some 1,800 fixed sites.

As the number of monitored water bodies and conditions climbs, so does the number of impairments. The 2004 assessment identified 309 water bodies with a total of 413 impairments (a water body can have multiple impairments). Still, overall water quality in the state remains good, with most water bodies meeting their standards.

In June 2004, the agency began revising the way it collects and uses data for assessing water quality. The intent is to ensure the agency has as sound a basis as possible for evaluating which water bodies attain their designated uses. With the help of stakeholders, staff examined such issues as the amount of data needed to make accurate assessments, as well as the timing and frequency of water sampling.

### TMDL Program

A key approach to restoring water quality in impaired surface waters is the Total Maximum Daily Load (TMDL) Program. A TMDL is a technical analysis that determines the maximum amount (or load) of a specified pollutant a body of water can

## TMDLs Completed, 1998-2004

Status	TMDLs	Water Bodies
Adopted by TCEQ	59	32
Approved by EPA	58	31
Implementation plan approved by TCEQ	50	31

Note: Sometimes just a portion of a river or lake is impaired, so the term “water body” may refer to one specific segment of a river or lake. Also, several TMDLs may be needed for a water body because one TMDL is required for each impairment.

receive and still meet its water quality standards. The TMDL divides the allowable discharge of the pollutant among the sources in the watershed—both point and nonpoint.

Pollution from a point source can be traced to a specific location, such as a wastewater treatment plant. Nonpoint source pollution comes from multiple locations and can be carried by runoff—for example, pollutants washing off farmland or urban streets into nearby streams.

Since 1998, TMDLs have been developed to address a number of the impaired water bodies on the 303(d) List. Developing and implementing successful TMDLs depends on cooperation from many parties. The general public, businesses, educators, agricultural producers, universities, and many others are called upon to work together with government agencies to restore water quality.

Moreover, the TCEQ alone does not have the authority to implement all of the needed management programs. Partnerships with other agencies, such as the Texas State Soil and Water Conservation Board, the Texas Department of Agriculture, the Texas Parks and Wildlife Department, and the Texas Department of Health, are critical to many TMDL plans. Also, EPA provides support through nonpoint source grants and other funding sources.

Of the 309 water bodies on the 2004 draft 303(d) List, almost two-thirds did not meet standards for contact recreation (such as swimming) and oyster harvesting because of high concentrations of bacteria. High levels indicate a possible health risk due to elevated densities of pathogens—some bacteria, viruses, and protozoans—that can cause disease.

Like most states, Texas does not directly monitor pathogens because of the difficulty and expense of doing so. Instead, the TCEQ tests for the presence of bacteria—for example, *E. coli* in freshwater and *Enterococci* in tidal and marine waters. These organisms, normally found in the wastes of warm-blooded animals, may indicate the presence of more serious pathogens.

After a water body is listed because of bacteria, the TCEQ must determine the origin of contamination, which can be difficult due to all the possible sources. This is where bacterial source tracking comes into play. Tracking is based on the premise that all warm-blooded animals harbor different types of microbial organisms. By determining what these differences are—at the molecular and physical levels—the host animal can be identified. Generally, the clues point to people, wildlife, chickens, cattle, or waterfowl as the source.

With the help of Texas A&M University, the TCEQ is building a comprehensive bacteria source library that allows for tracking a particular type of bacteria to a specific species of animal. Identifying significant sources of bacteria will lead to more effective source control.

### Storm Water Program

The 1998 transfer of authority from the National Pollutant Discharge Elimination System over storm water permits to Texas gave birth to the Texas Pollutant Discharge Elimination System (TPDES) storm water permits. As the permitting authority, the TCEQ has renewed the federal permits as they expired and has developed new storm water permits to conform with updated federal and state requirements.

The TCEQ now receives thousands of applications a year for coverage under TPDES storm water general permits.

In 2001, the TCEQ began administering the multi-sector general permit, which regulates storm water discharges from industrial sites. The permit groups similar industrial activities into sectors, with requirements specific to each of 29 sectors. Facilities must develop and implement a storm water pollution prevention plan, conduct regular monitoring, and use best management practices to reduce the discharge of pollutants in storm water. The permit also contains limitations for certain discharges—specific pollutants and concentrations that cannot be exceeded.

## Influx of Storm Water Permits

Storm Water Activity	State Permit First Issued	Number Affected	Applications Received Monthly (on average)
Industrial	August 2001	9,310 facilities	250
Construction	March 2003	16,000 large sites	1,200

In 2003, the agency issued a construction general permit for storm water runoff associated with construction activities, which include clearing, grading, or excavating land in building projects such as homes, schools, roads, and businesses. The permit divides construction activities by project size. Construction disturbing five or more acres is considered to be a “large” activity, while construction disturbing one to less than five acres is termed “small.” Construction operators at large sites are required to apply for coverage under the general permit. Operators at the small sites do not have to submit a permit application, but must post a notice informing the public that discharges of storm water are authorized. Therefore, no estimates are available on the number of small sites covered by the permit.

The TCEQ also is responsible for renewing the previously issued federal permits for discharges from medium and large municipal separate storm sewer systems (MS4s). These storm sewer systems (curbs, gutters, ditches, and pipes) are operated by cities with a population of 100,000 or more. About 25 individual permits fall into this category.

Completion of the MS4 storm water general permit, which was previously issued by EPA, was delayed pending the outcome of a case before the 9<sup>th</sup> U.S. Circuit Court of Appeals in which EPA’s regulations governing small MS4s were contested. The TCEQ is considering how to best regulate small MS4s in keeping with EPA’s guidance, subsequent to the 9<sup>th</sup> Circuit’s decision.

With the growing workload of the storm water program, the TCEQ has outsourced the management of incoming applications. The agency contracts with Texas State University at San Marcos for the administrative processing of applications for storm water general permits. The agency also has conducted dozens of workshops around the state to acquaint businesses—large and small—with the new permitting requirements.

## Livestock Operations

As part of the TPDES program, the TCEQ has oversight of concentrated animal feeding operations (CAFOs).

In 2004, the TCEQ amended its CAFO rules to expand and clarify the requirements for proper management of manure, litter, and wastewater. These new rules, which are designed to protect water quality, were necessary following changes to EPA’s regulatory requirements.

The new rule includes updated effluent limitation guidelines and a requirement for large CAFOs to submit an annual report. The TCEQ also clarified requirements for small animal feeding operations and replaced the registration authorization with a general permit. In addition, dry poultry operations are defined as CAFOs and now are required to obtain a permit.

The rules also address recommendations from the TMDL

implementation plan for the North Bosque watershed, where a large number of dairies operate upstream from Lake Waco. Now, there must be a greater margin of safety for retention control structures to capture runoff during rainfall, and comprehensive nutrient management plans are to be implemented for dairy CAFOs in a major sole-source impairment zone.

Dairy CAFOs operating in the Bosque watershed will have to apply for an individual permit, as well as CAFOs anywhere in the state that are located in a sole-source drinking water supply zone or coastal zone. Also, the executive director may require an individual permit of any facility deemed necessary—for example, because of a poor compliance record. The individual permit provides the option for a contested case hearing.

## New Drinking Water Standards

With drinking water standards scheduled to address revisions to one contaminant and to add one additional contaminant, the TCEQ has been working to prepare local governments and water district officials on what to expect.

To comply with new federal drinking water regulations, states are moving to add uranium to the list of contaminants, which must be controlled at certain levels, and to revise the arsenic standard.

Texas faces federal deadlines for adopting the new regulations—December 2004 for radionuclides and January 2005 for arsenic. The regulations are necessary to obtain federal approval for the state to administer these programs.

Most parts of Texas have very low levels of these naturally occurring contaminants in drinking water, but a small portion of public water systems—mostly those drawing from groundwater—will be affected by the new standards and monitoring requirements.

The TCEQ estimates that about 100 public water systems either violate existing rules or have the potential to violate the new radionuclide standards, and might have to spend a total of \$60-\$75 million on capital improvements to reach compliance.

Arsenic will be a concern for an estimated 220 public water systems, and new standards could generate capital costs totaling \$300-\$400 million. Small water systems are expected to be hardest hit because they have fewer customers to share the higher costs.

TCEQ representatives have appeared before all the major water associations to brief officials on the upcoming standards. The agency also has worked with stakeholders to seek advice and to collect data on compliance alternatives.

For public water systems that fail to comply with the new regulations, the TCEQ is prepared to initiate compliance agreements, in which the system notifies customers of the violation and conducts an economic feasibility analysis of compliance strategies.

The goal is to find an affordable option for compliance without the need for formal enforcement action.

The agency also will provide technical assistance to water systems to evaluate their compliance options. A 2004 pilot project with the University of Texas provided professional engineering expertise to several public water systems needing compliance assistance. This project will be expanded to include more water systems facing violations of drinking water standards for naturally occurring contaminants.

### Water Rights

Water flowing in Texas creeks, rivers, and bays is state water. Its use may be acquired through appropriation via the permitting processes established in state law.

Each application for a permit is reviewed by the TCEQ for administrative and technical requirements to evaluate its impact on issues such as other water rights, conservation, water availability, and public welfare.

In fiscal years 2003-2004, the TCEQ processed a total of 1,104 water rights actions, including new permits and amendments, water supply contracts, and ownership transfers.

### Ensuring a Safe, Continuous Water Supply

Public water systems are required to submit engineering plans and specifications for proposed new water systems or for proposed improvements to existing water systems. The engineering plans must be reviewed for compliance with TCEQ rules and requirements before the construction can begin. The agency reviewed 2,140 engineering plans for public water systems in the last two fiscal years.

Investor-owned utilities and water supply corporations also are required to obtain certificates of convenience of necessity (CCN) before providing utility service. A CCN is a permit issued by the TCEQ that authorizes a retail public utility to furnish adequate retail water or sewer utility service to a specified geographic area. Investor-owned utilities also must have an approved tariff that includes a rate schedule, service rules, an extension policy, and a drought contingency plan. The TCEQ has original jurisdiction over the rates and services of investor-owned utilities and appellate jurisdiction over the rates of water supply corporations, water districts, and out-of-city customers.

The TCEQ completed reviews of 526 CCN-related applications and 210 rate-related applications. In processing these applications, 113 financial, managerial, and technical reviews were completed, as well as 711 tariffs and 180 business plan reviews.

Agency staff strive to ensure that all water and sewer utility systems have the financial, managerial, and technical capability to operate a successful utility. Being able to attract capital to make

improvements and to properly manage the system keeps a utility in compliance so it can provide continuous and adequate service at reasonable rates.

The TCEQ contracts with the Texas Rural Water Association (TRWA) to assist utilities with financial, managerial, and technical competence. There were 900 utilities referred to the contractor for this assistance.

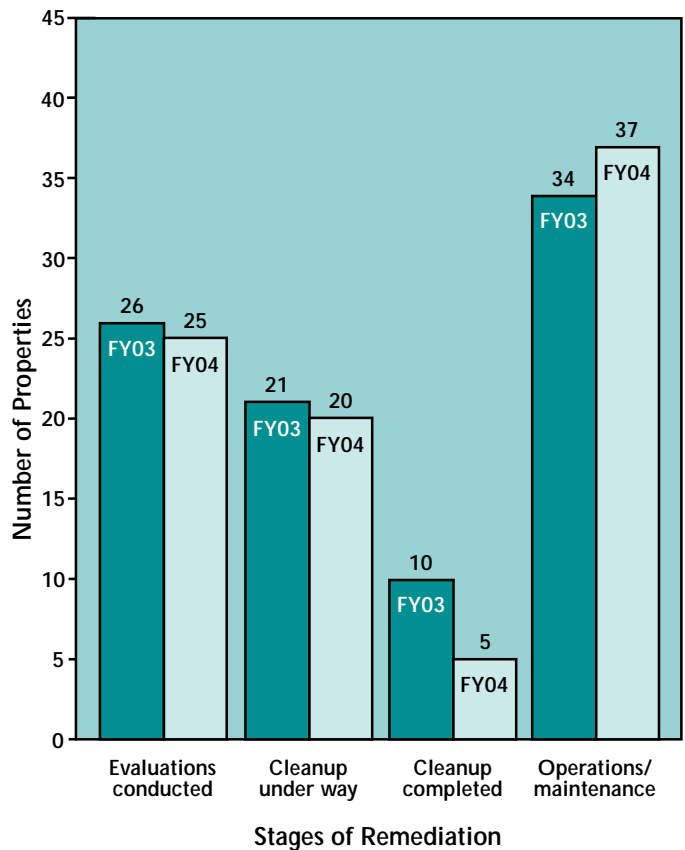
The agency also encourages water and sewer systems to regionalize in order to maximize resources. Regionalization can lead to better utility service at lower rates to the customers. The TCEQ certified more than 300 utilities as regional providers. This certification will make these utilities eligible for tax-exempt status for utility system construction and improvements, which encourages their continued efforts to regionalize water and wastewater utility services. The TCEQ and TRWA have conducted 20 regionalization assessments in an effort to encourage consolidations and mergers of water and sewer utility systems.

## WASTE MANAGEMENT

### Superfund Program

Superfund is the name given to the federal law that enables state and federal environmental agencies to take care of properties

### State and Federal Superfund Projects





contaminated by hazardous substances. Passed in 1980, the law gives EPA the legal power and resources to clean up abandoned or inactive sites where contamination poses the greatest threat to human health and the environment.

Texas has actively participated in leading the cleanups or supporting EPA. The state Superfund program deals with sites that were ineligible for the federal program. The program is the state's safety net for dealing with contaminated sites.

Proposing a site to the state Superfund registry enables the TCEQ to use state funds for cleanup operations at the contaminated property, if no responsible parties can or will perform the cleanup. The TCEQ then takes legal steps to recover the money spent.

In fiscal year 2003, Texas had a total of 91 sites in the state and federal Superfund programs, including two new sites—in Brazoria and Cherokee counties—that were proposed for the state registry. In fiscal year 2004, two more sites were proposed to the state Superfund registry—in Nueces and Cherokee counties. At the same time, four state sites with completed projects were deleted, leaving a total of 87 sites.

After a site is proposed for the Superfund program, the responsible party or the TCEQ proceeds with a remedial investigation, during which the agency collects information to determine the extent and nature of the contamination. A feasibility study follows to identify possible cleanup remedies.

A public meeting is held locally to explain the proposed remedy and to take comments. After reviewing the public comments, the TCEQ selects a remedial plan. Projects entering the Superfund program are prioritized by risk, with the most hazardous placed at the top of the list. Locating the responsible parties and resolving legal matters, such as access to the site, consumes time and resources. It can take several years for sites to be fully investigated and cleaned up, though the TCEQ will expedite its response when necessary.

The newest Texas listing on the federal National Priorities List is the Jones Road Groundwater Plume Superfund Site in northwest Harris County. The site is a groundwater plume contaminated with tetrachloroethylene (PCE) from a former dry cleaning operation. The suburban community is a mix of residences and businesses, many of which have private water wells.

PCE is a manufactured chemical that is widely used by dry cleaners. A TCEQ investigation determined that PCE has entered the Chicot Aquifer, which is a major water source for the area.

In August 2003, the TCEQ initiated a remedial investigation to verify the source of the contamination, and it began conducting quarterly sampling of water wells. About 200 wells have been sampled. To protect public health, the TCEQ installed filtration systems at wells where the PCE was found to exceed the maximum

contaminant level of 5 parts per billion. As of August 2004, 29 filtration systems had been installed. Meanwhile, the TCEQ has identified the existing plume and is monitoring plume movement. PCE has been detected in a 240-foot deep water well about 2,500 feet from the known source.

## Petroleum Storage Tanks

The contamination of groundwater and soil due to leaking petroleum storage tanks (PSTs) is an environmental problem known statewide. The TCEQ oversees PST cleanups and reimburses eligible parties who have met all statutory deadlines for reimbursement.

Since the program began in 1987, there had been 23,637 leaking PST sites—primarily those at gasoline stations—reported to the TCEQ by the end of fiscal year 2004. Of those, cleanup had been completed at 19,158 sites, and corrective action was under way at 4,479 sites. Of the total reported, 8,819 were confirmed to have affected groundwater.

Often, leaking PSTs are discovered when a tank owner or operator upgrades or removes tanks, when an adjacent property owner is affected, or when the tank leak detection system signals a problem. Sometimes leaks are detected during construction or utility maintenance.

Most tank systems that begin leaking have corroded, were installed incorrectly, or were damaged during construction or repairs. Contamination also can result from repeated spills when vehicles are overfilled with fuel.

Tank owners and operators are required to clean up releases from leaking PSTs. Cleanup begins with a site assessment, which includes drilling monitoring wells and taking soil and groundwater samples. The TCEQ oversees the remediation until cleanup is completed.

Under state law, leaking tanks discovered and reported after December 23, 1998, are not covered under the Petroleum Storage Tank Remediation Fund. These subsequent cleanups are paid for by the owners' environmental liability insurance, other financial assurance mechanisms, or from their own funds.

To avoid releases, tank owners and operators are required to properly operate and monitor their storage tank systems, to install leak detection equipment and corrosion protection, and to take spill and overfill prevention measures. This applies to both active and inactive PSTs.

The state continues to clean up sites at which the responsible party is unknown, or is unwilling or financially unable to do the work. State and federal funds are used to pay for the corrective actions.

State statutes allow cost recovery from the current owner or any previous responsible owner.

The reimbursement program, which was extended in 2001,

will not be available after September 1, 2006, for reimbursement purposes for any tank owners and operators.

Leading up to the 2006 Sunset date, several action milestones must be met for a responsible party to remain eligible for the fund. The agency requires a site and risk assessment, implementation of a corrective action plan, and submission of a site closure request. After the remediation fund expires, the PST regulatory program will continue.

PST releases reported on or after September 1, 2003, are subject to the Texas Risk Reduction Program, which represents a different set of assessment and cleanup standards.

## Municipal Waste Management

As a fast-growing state, Texas has to manage its solid waste needs effectively. That means helping to ensure that all regions of the state have adequate landfill capacity available, even in hard-to-serve areas. The agency's responsibility also entails working to reduce the overall amount of waste generated.

In fiscal year 2003, Texans disposed of almost 29.1 million tons of municipal solid waste, according to the latest available data. That annual amount of solid waste equaled about 7.2 pounds per person per day, which was lower than the 2002 per-capita rate of 7.3 pounds per day.

Even with the state's growing population, the total tonnage of waste disposed of in 2003 remained about even with 2002. The lower volume of disposal of commercial waste, as well as in construction and demolition debris, could be linked to the overall slowdown in economic activity, as consumers shifted purchases from goods to services.

By the end of fiscal year 2003, municipal solid waste capacity in Texas had reached 956 million tons, representing about 32.9 years of disposal capacity. Texas had 191 active municipal solid waste landfills; of those, 15 had applied for permit amendments to expand. These landfill expansions indicate a trend toward more regional landfills serving larger areas.

Most parts of the state appear to have adequate disposal capacity for the coming decades; however, capacity by region varies substantially. Some areas—as measured by council of governments (COG) regions—are far behind the statewide average. The Brazos Valley and Texoma COGs each have less than 10 years of disposal capacity, although facilities in these areas have filed new or amended municipal solid waste permits, which would expand capacity. Also of concern are the Lower Rio Grande Valley Development Council and the Houston-Galveston Area Council, each having less than 15 years of capacity.

Planning for additional landfill capacity is under way in these areas, too.

To address solid waste issues, particularly in critical areas, the

TCEQ manages a statewide planning program designed to ensure that Texas will maintain adequate landfill space. Regional plans have been developed by the 24 COGs to assess landfill capacity and to establish priority projects.

To assist the COGs, the TCEQ issues grants, which are funded by municipal solid waste disposal fees. For the 2003 grant period, a total of \$6.6 million in grants funded 247 local and regional projects. These initiatives included collection stations in underserved areas, recycling and organic waste management projects, education programs, and programs to enforce illegal dumping laws.

## POLLUTION PREVENTION

### Toxics Release Inventory

The Toxics Release Inventory (TRI), which is administered by EPA, documents the toxic chemical releases, transfers, and waste management activities that occur both on site and off site for 1,475 manufacturing plants and other facilities in Texas. These activities affect toxic releases to air, water, and land, including subsurface strata affected by underground injections.

As part of the federal Emergency Planning and Community Right-to-Know Act, the TRI was created to make information available to the general public on chemicals considered to be toxic to people, animals, fish, and plant life.

The database is used nationally as the leading indicator of trends in pollution prevention.

The most recent TRI data—released by EPA in June 2004—reflect activities that occurred in calendar year 2002.

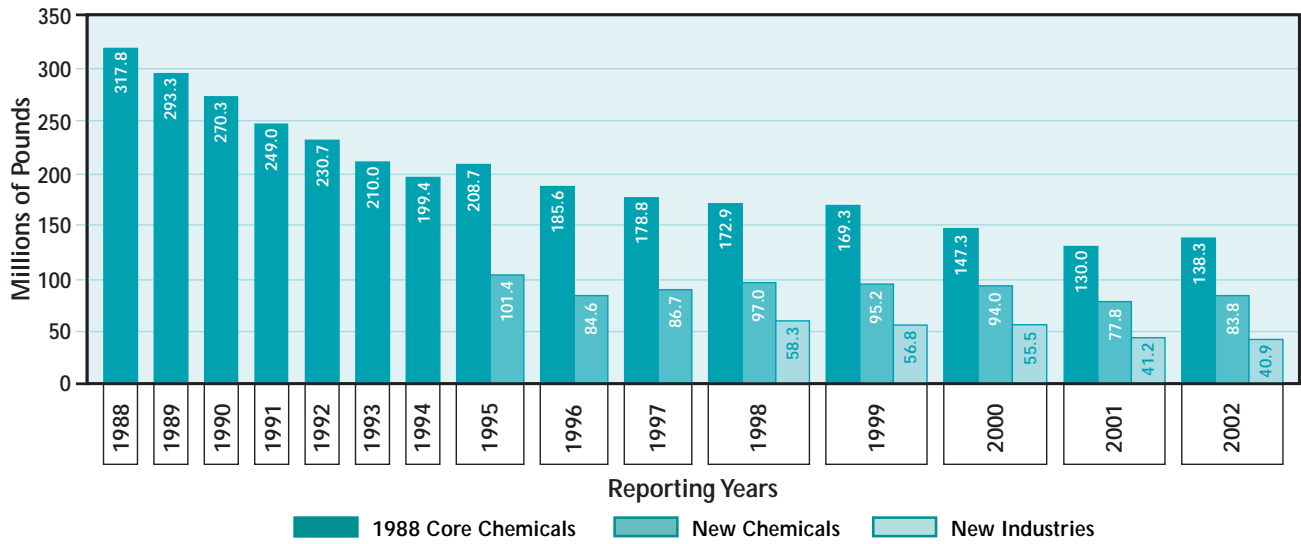
Over the years, the TRI reporting requirements have been modified. In 1987, the original list of toxics consisted of 308 chemicals and 20 chemical categories. By 2002, the list had been expanded to include an additional 285 chemicals and 8 chemical categories; 18 chemicals were removed. In 1998, EPA also included 7 new industry categories that were required to report their toxic chemical releases.

Because of the change in the industries and the chemicals that must be reported, a core set of chemicals common to all the reporting years from 1988 to 2002 is used for analyzing long-term trends within the TRI. On- and off-site releases and waste disposal totals are tracked annually for these “1988 core chemicals.”

Records for Texas facilities show that the amount of releases and disposals of the 1988 core chemicals fell from 317.8 million pounds in 1988 to 138.3 million pounds in 2002, a decrease of 56.5 percent.

A second method of analysis, looking at shorter-term trends, uses the 1988 core chemicals and the “new chemicals” that were added from 1988 to 1995. The amount of releases and waste

### TRI Trends: Total Releases for all Media



disposals in Texas has dropped from 310.1 million pounds in 1995 to 222.1 million pounds in 2002, a decline of 28.4 percent.

In 1998, seven new industry sectors were added to the inventory: oil- and coal-fired electric utilities, commercial waste management, solvent recovery, coal mining, metal mining, chemical distribution, and petroleum bulk terminals and stations. Incorporating this “new industries” data, along with the releases and waste disposals of the 1988 core chemicals and the new chemicals, the TRI shows a change for Texas from 328.2 million pounds in 1998 to 263 million pounds in 2002, a 19.9 percent reduction.

Beginning in reporting year 2000, a subset of the TRI chemicals was designated as persistent and bioaccumulative toxins (PBT). Due to the concerns about long-term effects caused by PBT chemicals, the thresholds for reporting these chemicals have been significantly lowered, compared to the other TRI chemicals. Lead and lead compounds were added to the list of PBT chemicals in 2001, expanding the number of PBT reporting facilities in Texas from 219 for reporting year 2000 to 516 for reporting year 2002. With only two consecutive years of data, a trend analysis has not yet been conducted for the PBT group.

### Environmental Management Systems

Legislation in 2001 directed the TCEQ to develop a comprehensive program that provides regulatory incentives to encourage the use of Environmental Management Systems (EMS). Lawmakers also required EMS to be integrated with the agency’s regulatory programs, including permitting, compliance assistance, and enforcement.

In fiscal years 2003-2004, the program focused on training

the regulated community in EMS development, building audit capacity, conducting effective audits, and delivering meaningful regulatory incentives. Also, Texas EMS was incorporated into the TCEQ’s CLEAN TEXAS-CLEANER WORLD, an environmental leadership program for all types of businesses and organizations. Two tiers offer a route to regulatory incentives through the creation and approval of an EMS.

The tier of Lone Star Leader offers state recognition and incentives, while the National Leader level provides federal recognition and incentives through EPA’s National Environmental Performance Track (NEPT). Making federal incentives available at the National Leader level was accomplished through an agreement with EPA—the first of its type in the country. Through the Texas process, sites can gain membership in NEPT and associated incentives.


Membership at either of these leader levels requires a performance-based EMS that focuses on site operations. That means maintaining or enhancing compliance, controlling or reducing environmental liability, and reducing pollution beyond what is required by rule.

**EMS Audits.** Participating sites are eligible for incentives once approved by a TCEQ evaluation that includes an on-site audit. These audits, which are conducted by agency staff or approved third-party auditors, focus on actual performance, operator behavior, and management techniques.

The TCEQ has worked with various partners to develop one of the country’s strongest audit programs. Partners included the University of Texas at Brownsville, the Texas Manufacturing Assistance Center, the city of Dallas, and numerous auditing and consulting firms.

## EMS Incentives in CLEAN TEXAS-CLEANER WORLD

Available Incentives	Lone Star Leader	National Leader
Reduced fees for TCEQ training	✓	✓
Technical and program assistance	✓	✓
Networking and partnerships	✓	✓
Annual recognition; use of logo	✓	✓
Custom marketing materials	✓	✓
A single point of contact for innovative programs	✓	✓
Credit under Compliance History	✓	✓
Exemption from Source Reduction and Waste Minimization Planning	✓	✓
In air programs, sites held to one standard rather than two similar standards (federal and state)		✓
Low inspection priority for EPA inspections		✓
A case-by-case reduction in state inspections*		✓

 Regulatory incentives

\*For entities with a high compliance history classification

**Regulatory Incentives.** Incentives, such as credit under the compliance history program, are designed for sites that have demonstrated sustained performance through implementation of an EMS. The performance is evaluated through the audits and compliance screening.

**Achievements.** By the end of fiscal year 2004, more than 70 business and industrial sites had formally committed to join the EMS program. CLEAN TEXAS-CLEANER WORLD participants reported 294,448 tons of emission reductions and about \$17 million in financial savings for the last two years.

### Renewing Old and Surplus Materials

The Resource Exchange Network for Eliminating Waste (RENEW) was established in 1988 to promote the reuse or recycling of industrial waste.

Since then, the materials exchange network has assisted in the exchanges of millions of pounds of materials, such as plastic, wood, and laboratory chemicals.

These successful exchanges divert materials from landfills, and help participants reduce waste costs and receive money for their surplus materials.

In the last two fiscal years, a total of 32,050 tons of materials was exchanged through RENEW. Much of that would have been disposed of in landfills.

The network is a marketing channel for industries, businesses, and governmental units looking to sell surplus materials, byproducts, and waste. These entities need to be linked with facilities seeking to reclaim and reuse the materials.

The RENEW catalog is published twice a year with free listings of “materials available” and “materials wanted.”

## RENEW Transactions

Fiscal Year	Number of Exchanges	Materials Exchanged	Savings in Disposal Costs	Earnings from Sales
2003	30	13,850 tons	\$823,900	\$160,400
2004	19	18,200 tons	\$898,500	\$887,000
<b>TOTAL</b>	<b>49</b>	<b>32,050 tons</b>	<b>\$1,722,400</b>	<b>\$1,047,400</b>

In addition to a printed catalog, RENEW supports an online resource at [www.renewtx.org](http://www.renewtx.org) to promote information exchange and networking opportunities with national and regional waste exchanges.

Some examples of RENEW exchanges in the last two years are:

- A small-scale furniture manufacturer in Central Texas avoided almost \$10,000 in disposal costs by donating wood shavings and scrap to a garden and landscape company, which turned the materials into mulch. The manufacturer's commitment to create a beneficial landscape product diverted 150 tons of materials from the landfill.
- A large chemical manufacturing plant in the Houston area is generating more than \$1.6 million a year in revenue and avoided disposal costs by marketing 25 million pounds of byproduct materials for use in fuel blending, which is a component in energy recovery. The byproducts, which would otherwise be disposed of by an industrial incinerator or waste management facility, are blended with other liquid hydrocarbons and sold to power plants.
- A military base in North Central Texas arranged to resell 33,000 pounds of old or unused paint, oils, adhesive, and solvents. Not only did this create a revenue stream, it helped avoid more than \$50,000 in disposal costs.

# Chapter Two

## Legislation Takes Effect

The Texas Commission on Environmental Quality was included in 123 pieces of legislation that were signed into law from the 78<sup>th</sup> legislative session. Eighty-six bills required some type of action by the TCEQ (the remaining 37 concerned water districts and were handled with minor administrative changes).

Thirty-eight bills resulted in rule making by TCEQ commissioners. Water issues led the list of new rule packages with 16; solid waste, 11; and air quality, 5. The remainder involved two or more of those topics.

The following measures are a few examples of new programs that originated with legislation.

### House Bill 1365

#### Funding for the Texas Emissions Reduction Plan

New revenue sources were created under HB 1365 to fully fund the state's incentive grants for reducing diesel emissions in nonattainment areas of the state.

These incentives, which are available through the Texas Emissions Reduction Plan (TERP), aim at achieving voluntary reductions of nitrogen oxides (NO<sub>x</sub>).

Eligible projects include purchases, replacements, repowers, retrofit technologies, infrastructures, and qualifying fuels. Projects are eligible for funding consideration if located in the 41 counties identified as nonattainment or near nonattainment for ozone, or in those counties otherwise affected.

As discussed in Chapter One, the TCEQ estimates more than 17,000 tons of NO<sub>x</sub> reductions will be achieved through 2007, thanks to the TERP grants approved in just the last two years.

The emissions reductions obtained under this program are vital to the state's plan to meet federal deadlines under the Clean Air Act for lowering ozone levels in several urban areas. The voluntary reductions were designed to replace mandatory restrictions on construction and industrial equipment activities.

The legislation also provided grant funding to aid in developing technology that addresses air emissions. As a result, the

A summary of all bills that included the TCEQ can be found at [www.tceq.state.tx.us/comm\\_exec/igr/78\\_legsum.html](http://www.tceq.state.tx.us/comm_exec/igr/78_legsum.html).

TCEQ's New Technology Research and Development Program will advance technologies that may be used in TERP-eligible projects.

### House Bill 1567

#### Disposal of low-level radioactive waste

The TCEQ has begun a license application review to determine whether a proposed low-level radioactive waste disposal facility can be sited and operated in a manner that is safe to the public, facility workers, and the environment.

In August 2004, one license application to construct and operate a low-level radioactive waste disposal facility in West Texas was filed. Waste Control Specialists of Dallas filed an application to operate a facility 30 miles from Andrews in West Texas. Along with the 4,000-page application, the company submitted the minimum required \$500,000 fee.

The TCEQ then set in motion a series of application reviews and analyses. Staff will determine whether the proposed facility achieves the complex and stringent environmental safety and public health standards established by law and agency rules. The commissioners are expected to decide whether to issue the license in 2007.

Under state and federal laws, the licensed Texas disposal facility could accept commercial low-level radioactive waste generated in Texas and Vermont—members of a waste disposal compact formed in 1998. A license issued by the TCEQ may also approve the operation of a separate, adjacent facility that accepts low-level radioactive waste from federal facilities.

Waste envisioned for the Texas "compact" facility generally includes discarded paper, plastic, glass, and metals that have been contaminated by or contain radionuclides. These materials are commonly generated by nuclear power plants, diagnostic and therapeutic nuclear medical facilities, industries, universities, and government. Waste bound for the adjacent federal facility could include contaminated soil and debris from federal facilities engaged in nuclear weapons research and production.

Neither disposal facility would be licensed to accept high-level radioactive wastes, such as spent nuclear fuel rods or weapons-grade plutonium.

As part of the license application review, staff will conduct an administrative completeness review and a merit evaluation, using criteria specified in legislation. The next step will be a thorough technical review. Finally, if an environmentally protective license is judged to be feasible, a draft license will be proposed.

If a draft license is proposed, there will be an opportunity for a contested case hearing held by the State Office of Administrative Hearings. The issue of whether to grant the license will then go before the commissioners.

## Senate Bill 1639 Environmental inflows

The TCEQ provided staff support for the Study Commission on Water for Environmental Flows as the panel conducted an interim examination of instream flows for environmental uses. The panel evaluated public policy implications regarding the balance of demands on the state's water resources, resulting from population increases, with the requirements of bays and estuaries, including granting permits for environmental flows. A Science Advisory Committee was appointed to review hydrological conditions and to assess available methodologies for identifying environmental flow needs.

The TCEQ gave public testimony during the study commission's initial public meeting, presenting an overview of the agency's surface water permitting program. In addition, the agency provided administrative, logistical, and resource support for the Science Advisory Committee. Agency staff also served as resource witnesses, providing information on the water rights permitting process, water availability models, and the state's hydrology database.

An interim report issued by the panel described surface water management in Texas, discussed environmental flows for river and estuary systems, and analyzed potential strategies for meeting identified environmental flow needs.

## House Bill 9 Homeland security

In response to legislative directives to augment the state's homeland security measures, the TCEQ served on the Critical Infrastructure Protection Council, and analyzed its own ability to respond to external threats and natural disasters affecting the infrastructure it regulates.

The council was created to advise the governor on planning and coordinating homeland security initiatives. The TCEQ is one of a dozen state agencies helping to evaluate and propose protection measures for critical infrastructure around the state.

Infrastructure concerns directly involving the TCEQ include: dams; public drinking water supplies; refineries, fuel terminals, and petrochemical facilities; wastewater treatment plants; and hazardous waste treatment storage and disposal facilities.

TCEQ staff regularly communicate with the owners and operators of these facilities and, as part of HB 9, coordinate with the Governor's Office of Homeland Security and the appropriate

federal agencies. The TCEQ also works to train and educate personnel at these facilities on emergency preparedness.

For example, guidance on maintaining secured supplies of drinking water has been made available to all of the state's 6,500 public water systems. TCEQ staff have made public presentations on homeland security measures at major conferences attended by water system operators, managers, and officials. The agency also has assisted with the vulnerability assessments and emergency response plans required by EPA of water systems serving a population of more than 3,300.

In addition, investigators inspecting plants for compliance with air quality rules routinely check to see that disaster mitigation measures are in place. As part of a nationwide effort, portions of the state's air monitoring network are designed for the early detection of intentional releases, such as biological agents, in designated areas across Texas.

Any local environmental concerns identified by Texans in their communities can be reported to the agency's 24-hour hot line at 1-888-777-3186.

To better address homeland security, the TCEQ moved to ensure the confidentiality of agency records related to security and emergency responses. It also fine-tuned communications strategies inside and outside of the agency, and developed partnerships with local, state, and federal agencies to maintain effective coordination in the event of a security incident.

## House Bill 1366 Environmental regulation and remediation of dry cleaning facilities

In fiscal year 2004, the TCEQ began collecting fees for a new remediation fund that will help pay for the cleanup of contaminated dry cleaner sites. The fees are associated with the annual registration of facilities and the sale of perchloroethylene and other dry cleaning solvents. Dry cleaning facilities and drop stations were required to register with the agency.

By August 2004, about 2,110 dry cleaning facilities and 1,641 drop stations had registered, and \$4.4 million had been collected. About 18 percent of registered facilities opted out of the remediation fund, saying they had never used perchloroethylene and would not do so in the future.

Throughout development of the program, the TCEQ consulted with the bill's sponsors and an advisory committee.

The agency worked to establish performance standards to prevent or minimize leaks of solvents into the environment. After final adoption of the rules, on-site evaluations of dry cleaners will begin in early 2005 to determine which facilities are contaminated. The remediation fund will be used to address problems such as contaminated groundwater.

# Chapter Three

## Agency Resources

**W**ith a central office in Austin and 16 regional offices, the Texas Commission on Environmental Quality has a role to play in every quarter of the state.

The agency has about 3,000 employees—almost 30 percent of whom are located in the regions. Field staff have the responsibility of dealing directly with municipalities, business and industry, and community groups. From El Paso to Beaumont and Amarillo to Harlingen, these frontline employees conduct investigations, answer emergency calls, and provide helpful information to Texans.

The agency’s budgetary needs are based on the demands of protecting human health and the environment. The operating budget totaled \$377.1 million for fiscal year 2003, and \$464.4 million for fiscal year 2004. Most of the agency’s annual revenues were generated by fees.

### WORKFORCE

The overall size of the TCEQ workforce has remained consistent. In fiscal year 2003, the agency was authorized to have 3,032 full-time equivalent (FTE) positions. Of those, 2,866 were filled in August 2003, including one contractor position. In fiscal year 2004, the authorized FTE count was 3,038. Of those, 2,874 were filled in August 2004, including seven contractor positions.

Professionals and paraprofessionals represent about 65 percent of the agency’s workforce; officials and administrators fill about 10 percent of positions; and technical and administrative support staff make up about 25 percent.

It is the TCEQ’s policy 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.

The agency is committed to recruiting, selecting, and retaining a diverse workforce that is representative of the state’s civilian labor force. In addition, all employees are provided training on equal employment opportunities to make them aware of state and federal employment laws and regulations.

By race and ethnicity, the workforce composition was: white, 69.1 percent; Hispanic, 14.6 percent; black, 10.3 percent; and other (including Asian), 6 percent.

Men represented 51.6 percent of agency employees; women, 48.4 percent.

In 1999, the Legislature began requiring each state agency to conduct an analysis of its workforce by ethnicity and gender. The

TCEQ compares its workforce to the state civilian workforce, using data provided by the Civil Rights Division of the Texas Workforce Commission. These data sets provide the percentage of blacks, Hispanics, and females—by job category—within the total civilian labor force in Texas.

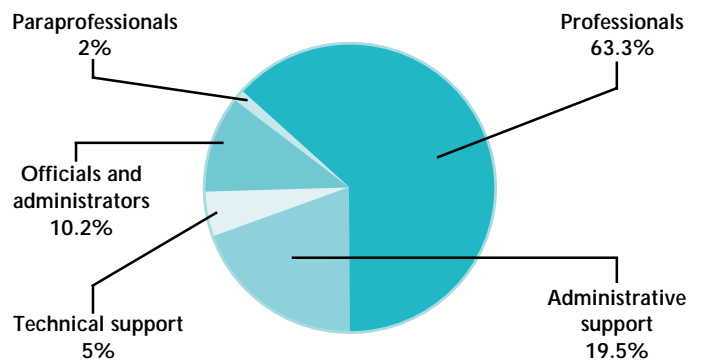
At the end of fiscal year 2004, the TCEQ minority workforce exceeded the percentages of the available labor force in top management (officials and administrators) for Hispanics and females. In the job category for professionals, the TCEQ workforce exceeded percentages of the available Hispanic labor force, but was below the percentages of the available female labor force and slightly below percentages of the available black labor force.

### FINANCES

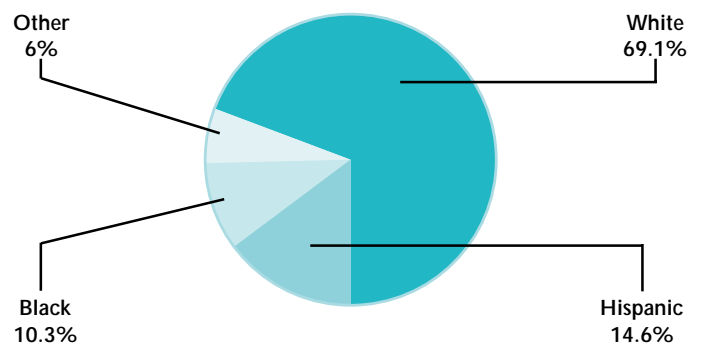
In fiscal year 2003, the agency’s operating budget was \$377.1 million. Of that, \$303.3 million came from dedicated fee revenue; \$38.8 million from federal funds; and \$30 million from general revenue, including earned federal funds. Other sources provided the remaining \$5 million.

### TCEQ Workforce

#### By Job Category



#### By Race and Ethnicity





In fiscal year 2004, the operating budget totaled \$464.4 million. Of that, \$370.7 million came from dedicated fee revenue; \$45.3 million from federal funds; and \$27.4 million from general revenue, including earned federal funds. Other sources provided the remaining \$21 million.

The primary reason for the budget growth in fiscal year 2004 was additional revenues received for the Texas Emissions Reduction Plan and the AirCheckTexas low-income assistance program.

The agency collects more than 80 separate fees. The fees generating revenue in excess of \$30 million a year were:

**Texas Emissions Reduction Plan** (\$24.4 million in FY 2003; \$141.8 million in FY 2004): Assessed on the sale, registration, and inspection of vehicles. The TERP “fee” is actually made up of five separate fees and surcharges. A surcharge on vehicle titles was added in the final months of fiscal year 2003, resulting in a substantial revenue increase in fiscal year 2004. The Texas Comptroller collects this fee.

**Petroleum product delivery fee** (\$87 million in FY 2003; \$72.4 million in FY 2004): Assessed against bulk delivery of petroleum products. The fee is collected by the Comptroller’s office and is deposited to the Petroleum Storage Tank Remediation Account.

**Air emissions fee** (\$37.5 million in FY 2003; \$36.9 million in FY 2004): Authorized to recover the costs of developing and administering the Title V Operating Permit Program.

**Solid waste disposal fee** (\$36.1 million in FY 2003; \$36.3 million in FY 2004): Assessed against operators of municipal solid waste facilities for disposing of solid waste.

**Motor vehicle safety inspection fee** (\$30.1 million in FY 2003; \$31.9 million in FY 2004): Assessed per vehicle on the sale of state safety inspection stickers to inspection stations, auto dealers, and other service providers. The fee is collected by the Texas Department of Public Safety and deposited to the Clean Air Account.

Pass-through funds accounted for 46 percent of the agency’s operating budget in fiscal year 2003, and 47 percent in fiscal year 2004. Pass-through funds are used primarily for grants, contracts, and reimbursements in the agency’s programs for petroleum storage tanks, Superfund cleanups, and municipal solid waste. The water and air programs also pass dollars on to local and regional units of government, but the amounts are not as significant.

The remaining operating funds were devoted to agency operations. Salaries accounted for about 35 percent of the fiscal

year 2003 operating budget, and 31 percent of the 2004 budget. The remainder was consumed by other expenses, such as supplies, utilities, rent, travel, training, and capital.

### Fee Revisions

Several changes were made to the TCEQ’s fees and funding structure as a result of legislation passed in 2003.

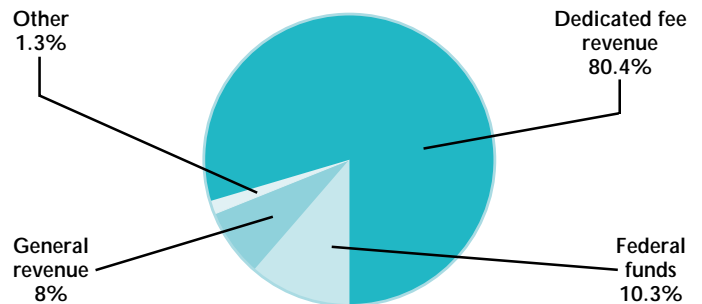
Two new dedicated accounts were created, beginning in fiscal year 2004. House Bill 1366 established a new program for the regulation and remediation of dry cleaning facilities, with a separate dedicated account titled Dry Cleaning Facility Release Fund Account 5093. HB 1481 resulted in the transfer of the existing Title V program from the Clean Air Account 0151 to a separate account, Operating Permit Fees Account 5094.

In addition, HB 1365 increased funding for the TERP through a new surcharge on vehicle titles. The fee is \$20 for applicants residing in an ozone nonattainment county and \$15 for residents of all other counties. This new fee accounts for about 70 percent of total TERP revenues.

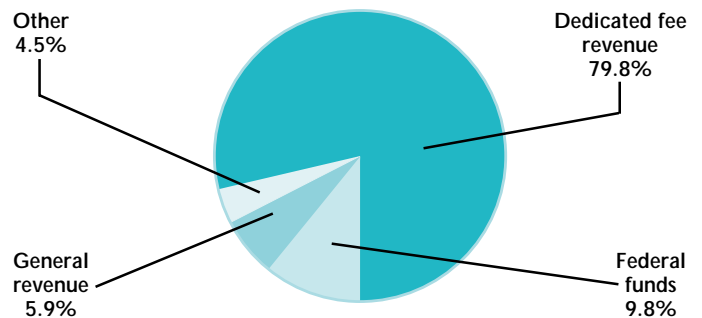
Several other new fees were introduced in fiscal year 2004. A fee not to exceed \$500 per application will be assessed for the repeal or revocation of local administration of an on-site sewage facility program. However, no such revocation had occurred, as of August 2004. The other new fee was \$75 to request an expedited letter from the TCEQ stating the requirements for well surface casing.

### Annual Operating Budgets

FY 2003: \$377.1 million



FY 2004: \$464.4 million



# APPENDIX

## Assessment of Complaints Received FY 2003 - FY 2004

Each year, the Texas Commission on Environmental Quality receives thousands of complaints from Texans concerned about various environmental matters. In these communications, the complainant relates a situation or event in which a possible environmental, health, or regulatory violation has occurred. Typically, complaints come to the TCEQ's 16 regional offices by phone, e-mail, or letter. The agency maintains a 24-hour, toll-free hot line, which is 1-888-777-3186, for receiving such calls.

In 2001, the Legislature directed the TCEQ to conduct an analysis of the complaints it receives each year. The analysis is to include the following categories:

- Air
- Water
- Waste
- Priority classification
- Region
- Commission response
- Enforcement action
- Trends by complaint type

The legislation also directed the agency to assess the impact of changes made in the commission's complaint policy. These requirements were contained in Article 1, Section 1.17 of House Bill 2912, 77<sup>th</sup> Legislature, which amended Section 5.1773, Subchapter E, Chapter 5, of the Texas Water Code. In addition, the legislation amended Section 5.178 of the Texas Water Code to require that a summary of these analyses be published biennially, as part of the reports required by Section 26.0134 of the Water Code.

### Complaint Data Collection and Reporting

By September 2002, the TCEQ regional offices had fully implemented the Consolidated Compliance and Enforcement Data System (CCEDS), which became the mechanism for collecting and reporting complaints data, as well as all data related to the compliance of entities regulated by TCEQ rules.

Regional management then assign the complaint to an investigator, who is responsible for investigating the complaint and entering all resulting data into CCEDS. Review,

approval, and closure of complaint investigations are performed by management, and all additional data are entered into the system.

All of the data reviewed and summarized for this report were extracted from CCEDS. The analysis reflects activity that occurred in the TCEQ regions in fiscal year 2003 (September 1, 2002, to August 31, 2003) and fiscal year 2004 (September 1, 2003, to August 31, 2004). The data are presented in a series of charts (Figures A-2 to A-9).

### Complaints by Region

In fiscal year 2003, the TCEQ regional offices received a total of 7,426 complaints. The total declined in fiscal year 2004 to 7,232. Figures A-2 and A-3 show the complaints received by each of the TCEQ regional offices. These include complaints in all priority classifications (see below), including complaints that were received but were not eligible for investigation by this agency.

The annual regional data show that the number of complaints received varies generally by regional population. For example, the Region 12 office in Houston received the most complaints, followed by Region 4 in Dallas-Fort Worth.

Because this report contains the first complete set of complaints data for a biennium, as recorded in CCEDS, no conclusions can be drawn regarding trends. In future biennial reports issued by this agency, the total complaints received will be compared to the previous two-year period, and trends will be evaluated.

### Complaints by Media (Air, Waste, and Water)

For both fiscal years, total complaints received can be analyzed by environmental media—on a statewide basis and by regions. As seen in Figure A-4, the largest number of complaints received statewide were those pertaining to air.

Regional data in Figures A-5 and A-6 show that the large number of air complaints in the heavily populated Houston and Dallas-Fort Worth areas account for most of the complaints in this media type.

Otherwise, there is a wide variation among regions as to which media type received more complaints.

## Complaints by Priority Classification

Complaints received by the regional offices are prioritized in one of the following categories, based on their relative threat to public health, safety, or the environment. Each priority level has a prescribed response time, as follows:

**Priority 0. Other specified time frame.** This classification is for special projects that are not anticipated but occur on demand. Response time is based on management's evaluation of the project and workload.

**Priority 1. Immediate Response.** As soon as possible, but no later than 24 hours from receipt.

**Priority 2. Respond within 1 working day.** As soon as possible, but no later than 1 working day from receipt.

**Priority 3. Respond within 14 calendar days.** As soon as possible, but no later than 14 calendar days from receipt.

**Priority 4. Respond within 30 calendar days.** As soon as possible, but no later than 30 calendar days from receipt.

**Priority 5. Respond within 45 calendar days.** As soon as possible, but no later than 45 calendar days from receipt.

**Priority 6. Respond within 60 calendar days.** As soon as possible, but no later than 60 calendar days from receipt.

**Priority 7. Refer or do not respond.** Complaints the TCEQ does not routinely investigate, but that need to be tracked. This priority level is also used for referrals to other government entities for investigation due to jurisdictional issues.

For this report, the distribution of complaints is shown by priority classification statewide (Figure A-7). About 80 percent of all complaints each year were classified as Priorities 1 to 4, meaning they were scheduled for investigation within 30 calendar days. About 10 percent of complaints received were classified as Priority 7 and were not investigated by this agency—typically because they were not within the TCEQ's jurisdiction. In most cases, these complaints are referred to another governmental entity.

## Complaints That Trigger Enforcement Action

All complaints received by the TCEQ are investigated according to the priority levels, as indicated above. Subsequent action depends on the results of each investigation. For the majority of complaints received, no specific enforcement action is necessary to resolve the complainant's allegation. In some

cases, however, the agency must take enforcement action in the form of a Notice of Violation or a Notice of Enforcement.

Issuance of a Notice of Violation (NOV) indicates that TCEQ rules have been violated, but the violation is not considered serious enough to require an enforcement order, and is expected to be resolved quickly within a time frame specified by the investigating regional office.

A Notice of Enforcement (NOE) occurs when a substantial violation of TCEQ rules has been documented and some formal action is required. Often, an NOE leads to the assessment of administrative penalties.

In fiscal year 2003, the agency issued 1,287 NOVs and 203 NOEs as a result of complaint investigations; in fiscal year 2004, the totals were 1,208 NOVs and 196 NOEs (Figure A-8).

About 20 percent of all the complaints received resulted in an NOV or an NOE. Only about 3 percent required a formal NOE from the agency; 17 percent were handled with NOVs.

## Complaints Investigated by Program Type

Another way of analyzing complaints is by the type of investigation conducted to address each complaint—in other words, the program type. Air complaints in CCEDS are not usually subdivided by program type, but waste and water each have several subcategories of programs.

Waste program types include: petroleum storage tanks, industrial and hazardous waste, municipal solid waste, and Stage II vapor recovery.

Water program types include: animal feeding operations, dam safety, Edwards Aquifer, on-site sewage facility, public water supply, sludge transporters and land application, storm water, water rights, and wastewater.

Figure A-9 shows the number of complaint investigations that were conducted in each program type. Air complaints represented 49.6 percent of complaints investigated in fiscal year 2003 and 52 percent in fiscal year 2004. Waste programs amounted to 21.3 percent in fiscal year 2003 and 21 percent in fiscal year 2004. Water programs were the basis of 29 percent in fiscal year 2003 and 27.3 percent in fiscal year 2004.

## Summary

A direct comparison of this analysis to previous years' complaints is not possible due to the 2002 changeover to the Consolidated Compliance and Enforcement Data System. But generally, the complaint data presented in this report are typical of the complaints received in previous fiscal years.

Whether counting the complaints received or the complaints investigated (regardless of the data system in use), the air program usually accounts for about 50 percent of com-

plaints; waste programs, about 20 percent; and water programs, about 30 percent.

The agency investigates all complaints that are within its jurisdiction and that meet the criteria for opening an investigation. The vast majority of complaints received met these standards and were investigated (about 90 percent in fiscal year 2003 and 88 percent in fiscal year 2004).

About 80 percent of the complaints were prioritized at Levels 1 to 4, resulting in an investigation within 30 days or sooner.

Consistent with the agency’s goal to achieve voluntary compliance with its rules, about 80 percent of the complaints

received by the regional offices were resolved with no commission action.

As indicated in this analysis, about 17 percent of the complaints received result in NOVs, which typically are resolved based on corrective actions by the facility or individual being regulated. About 3 percent of the complaints received resulted in more formal enforcement action, including agreed orders, contested case hearings, and referrals to the Texas Attorney General for legal action.

*Note: This report was prepared by the TCEQ’s Field Operations Division.*

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Figure A-1

# TCEQ REGIONAL OFFICES

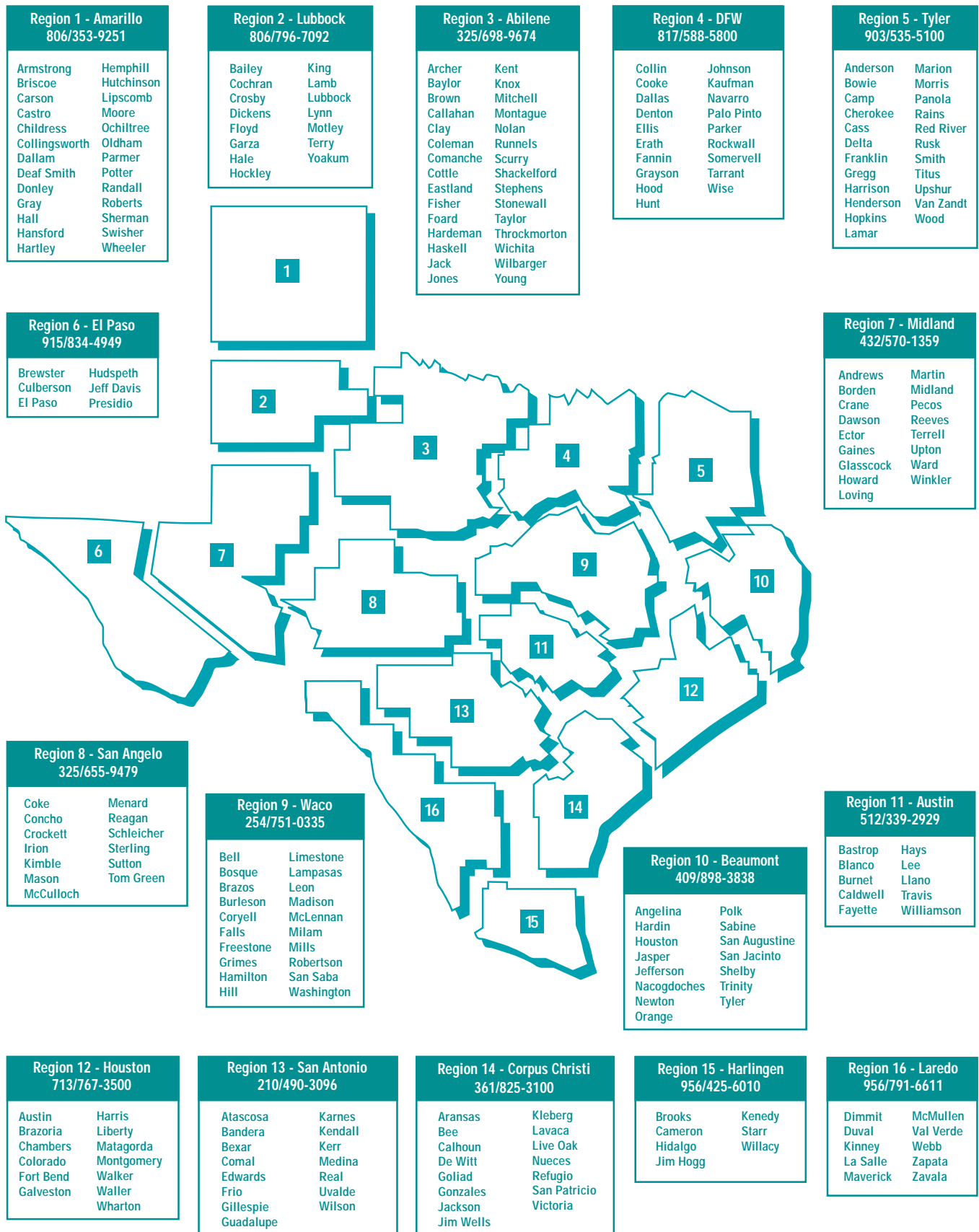


Figure A-2

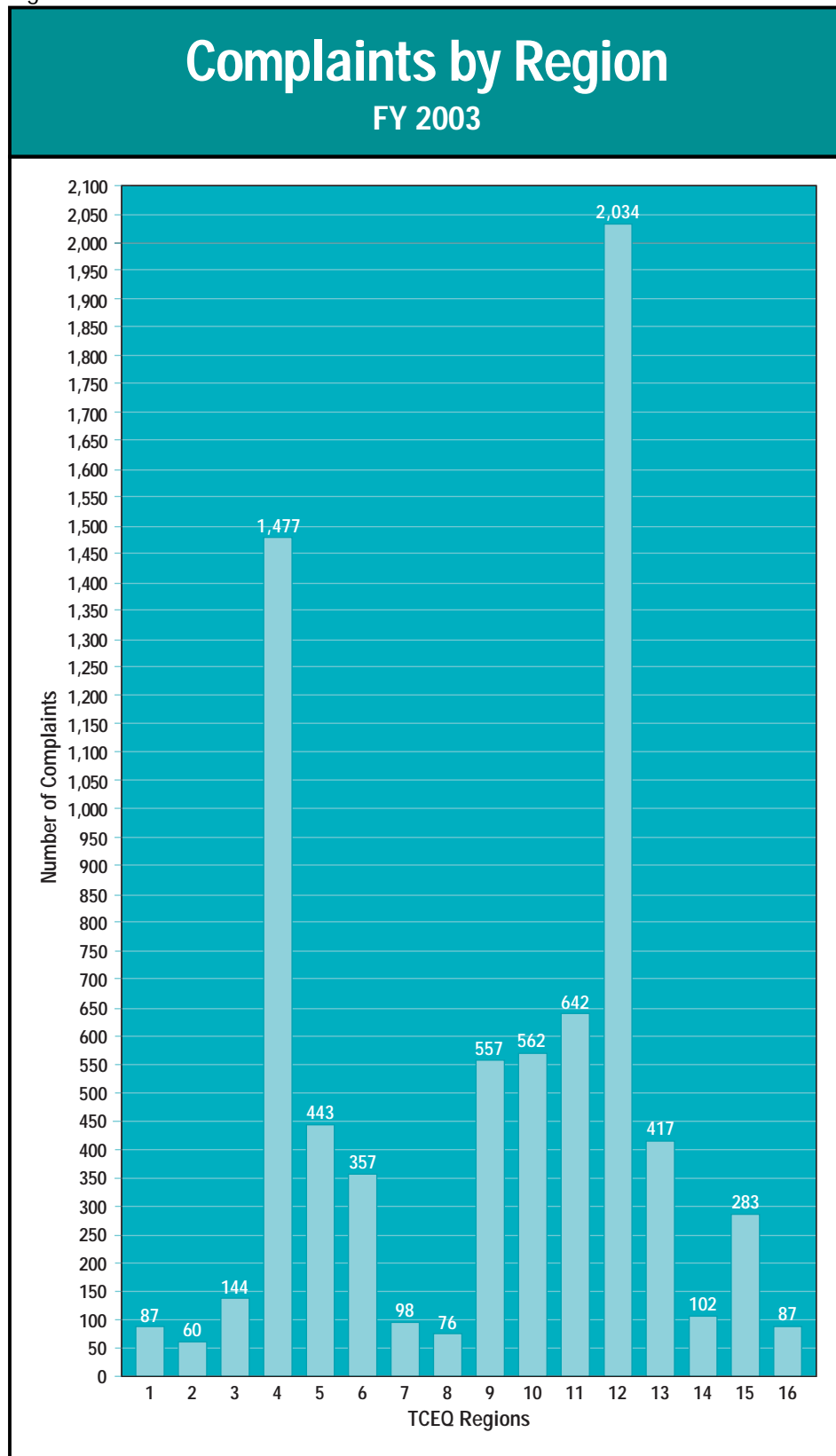
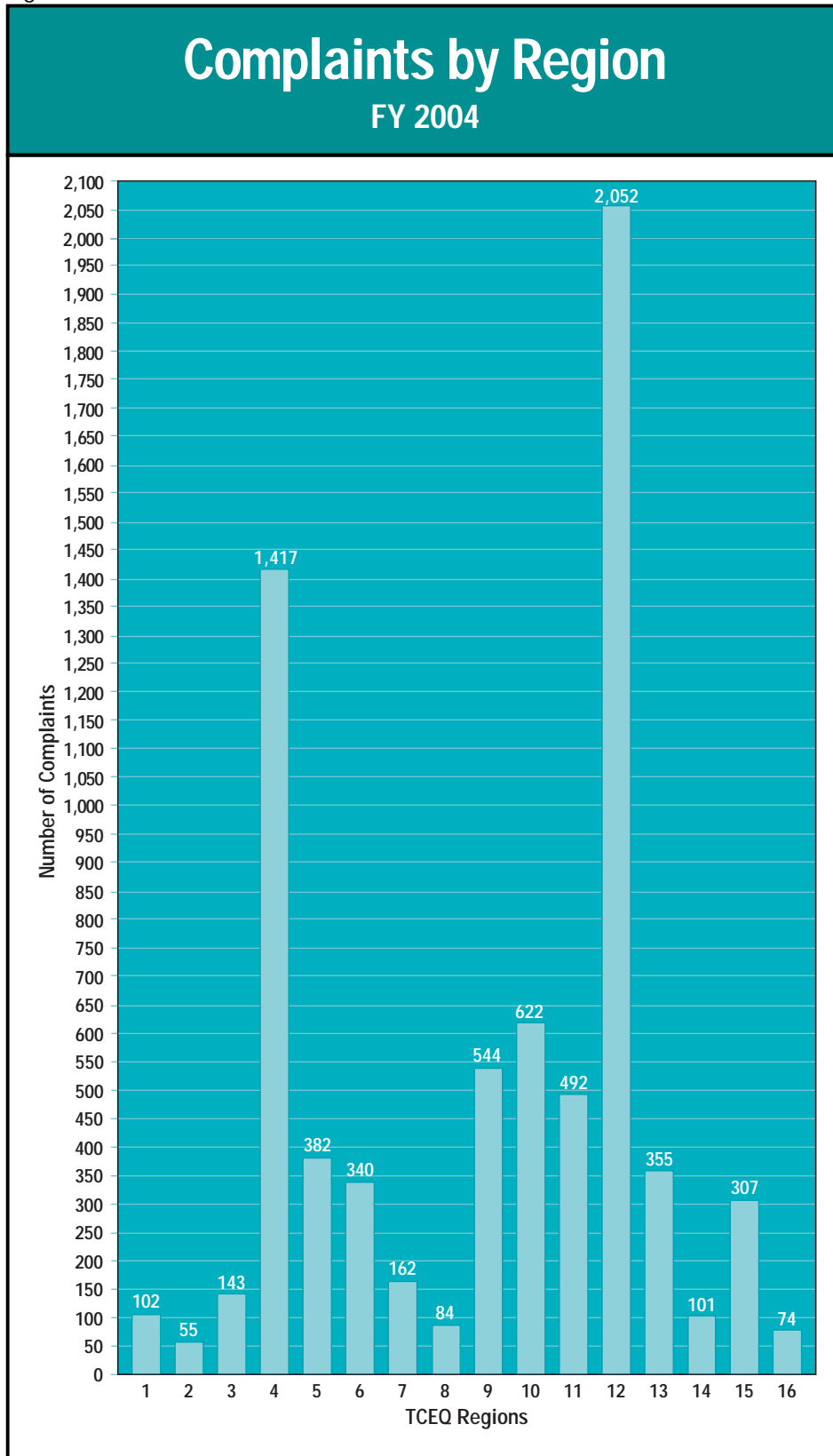


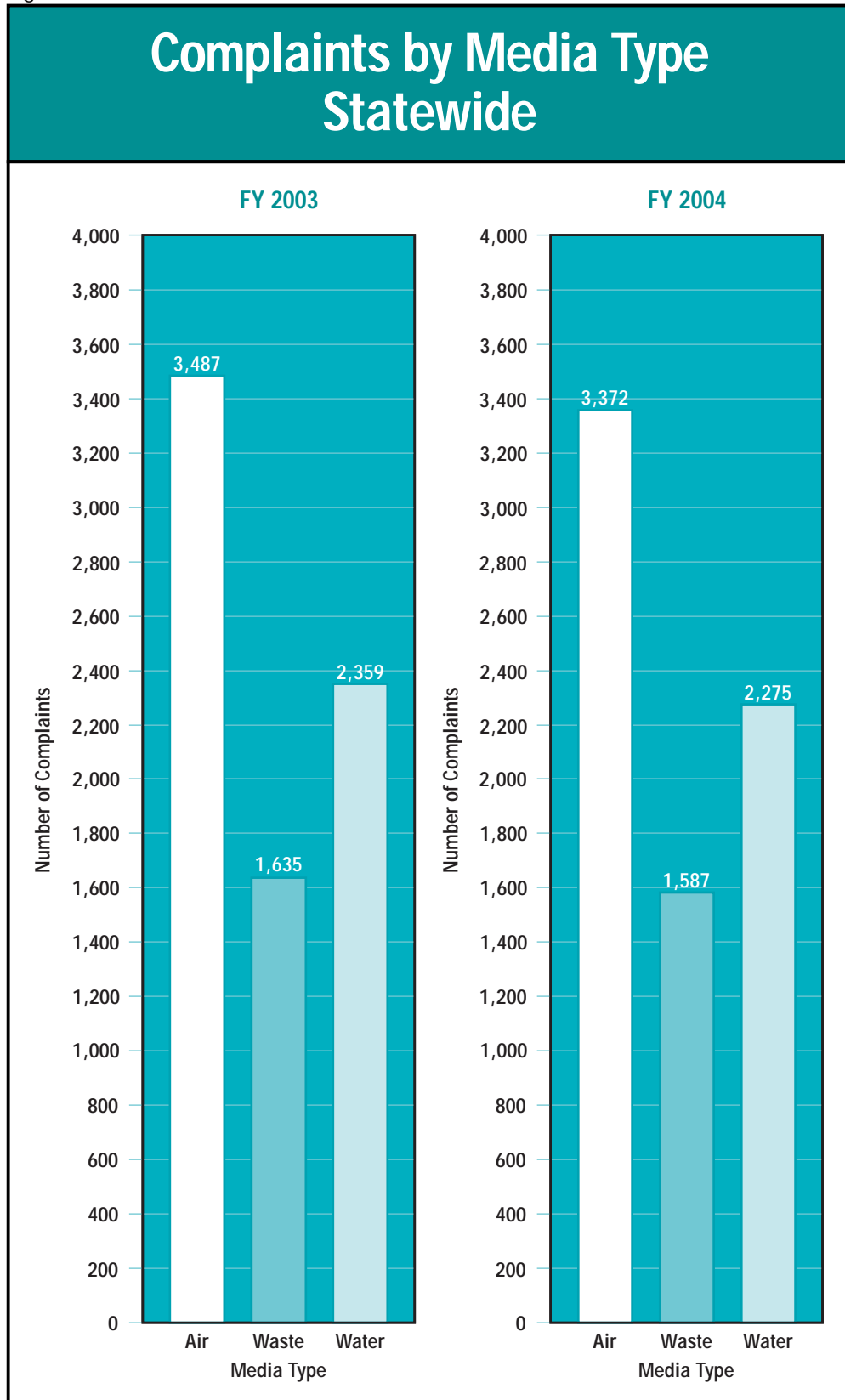
Figure A-3





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Figure A-4



Note: Some complaints are assigned to more than one medium, and some are not assigned to any. Therefore, totals vary from total complaints received.

Figure A-5

# Complaints by Region and Media Type

FY 2003

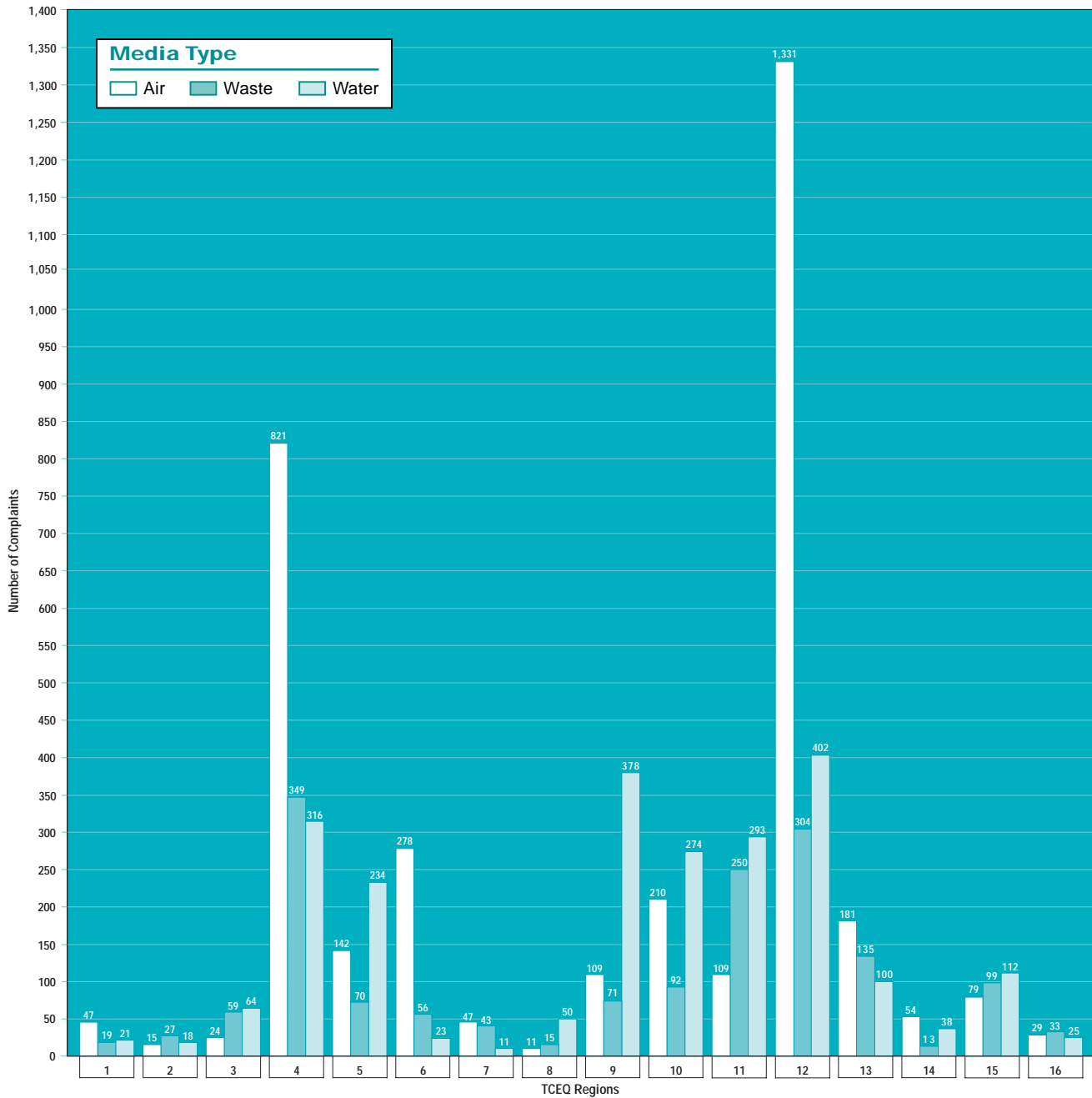


Figure A-6

# Complaints by Region and Media Type

FY 2004

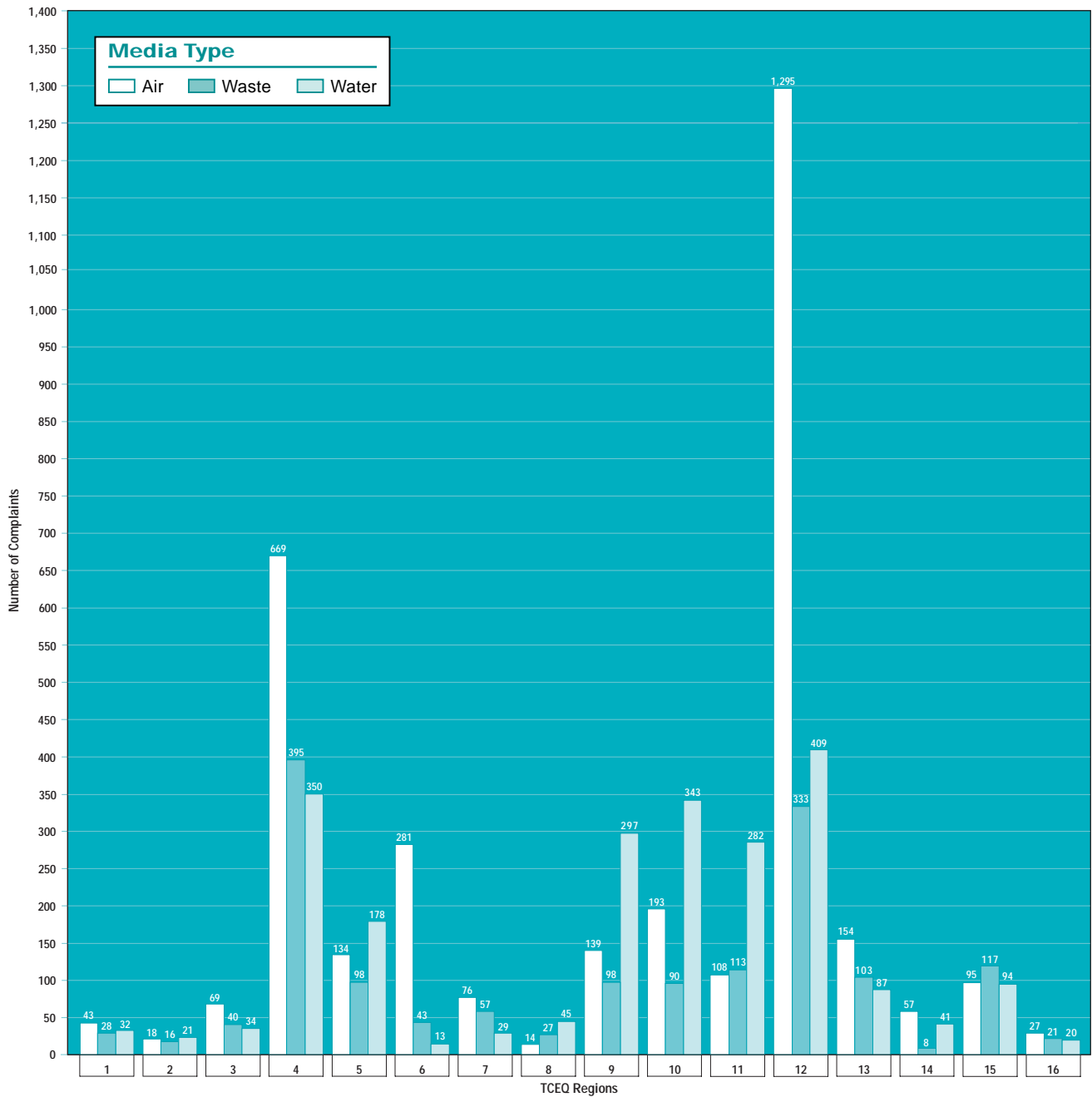


Figure A-7

<b>Complaints by Priority Level Statewide</b>			
<b>FY 2003</b>		<b>FY 2004</b>	
<b>Priority Level</b>	<b>Number of Complaints</b>	<b>Priority Level</b>	<b>Number of Complaints</b>
0	54	0	73
1	314	1	165
2	1,450	2	1,285
3	1,174	3	1,113
4	3,062	4	3,184
5	396	5	395
6	195	6	180
7	781	7	837

Note: For an explanation of priority levels, see "Complaints by Priority Classification" on page 22.

Figure A-8

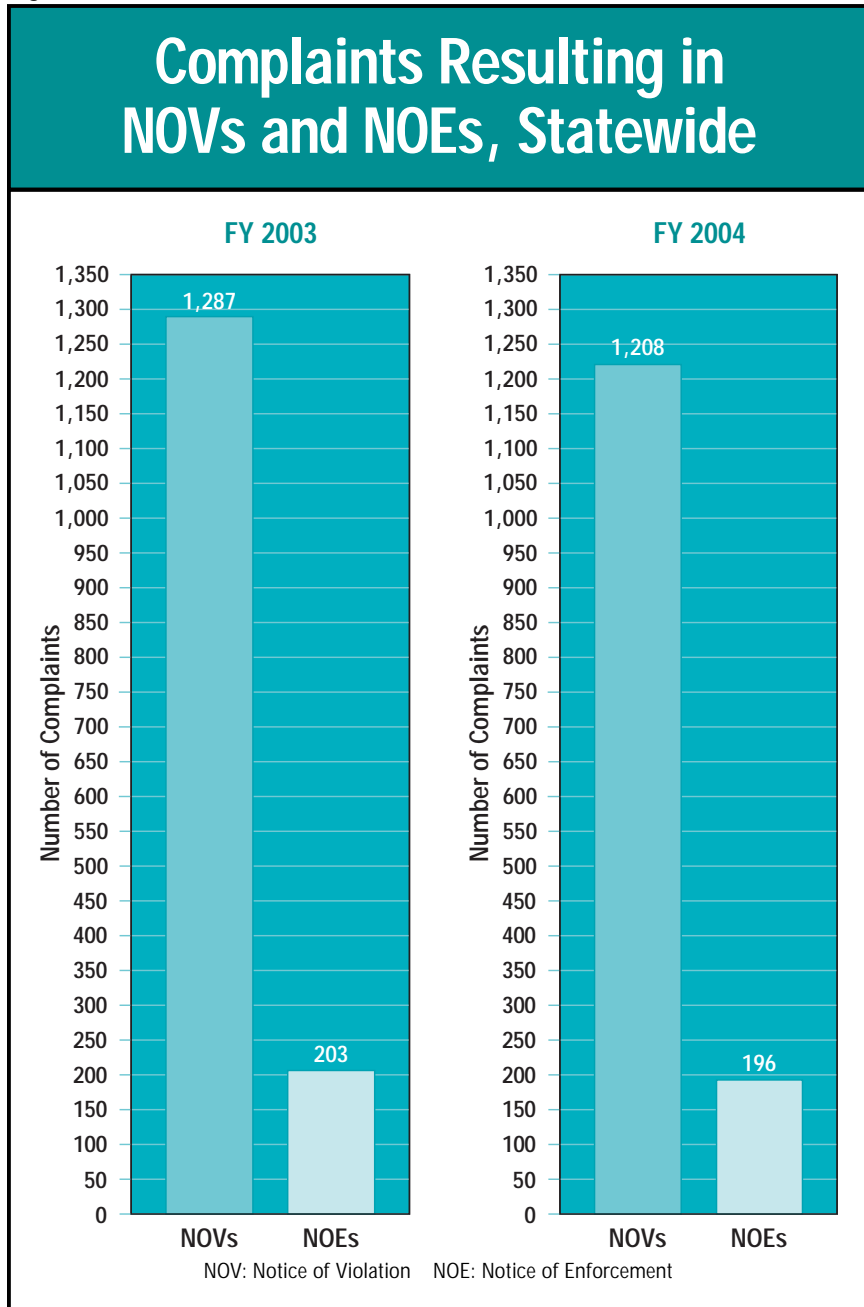


Figure A-9

Complaint Investigations by Program Type		
Program Type	FY 2003	FY 2004
Animal Feeding Operations	79	64
Air	3,295	3,121
Petroleum Storage Tanks	294	266
Dam Safety	4	0
Edwards Aquifer	31	27
Industrial and Hazardous Waste	333	309
Municipal Solid Waste	701	604
On-Site Sewage Facilities	354	296
Public Water Supply	596	406
Sludge	56	65
Stage II Vapor Recovery	88	74
Storm Water	223	347
Water Rights	44	55
Wastewater	540	380

## How to reach the TCEQ

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By mail:

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Austin TX 78711-3087

Web site: [www.tceq.state.tx.us](http://www.tceq.state.tx.us)

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