Below is an Electronic Version of an Out-of-Print Publication

You can scroll to view or print this publication here, or you can borrow a paper copy from the Texas State Library, 512/463-5455. You can also view a copy at the TCEQ Library, 512/239-0020, or borrow one through your branch library using interlibrary loan.

The TCEQ’s current print publications are listed in our catalog at http://www.tceq.state.tx.us/publications/.
Environmental Assistance Report: Preventing Pollution, Conserving Resources, Achieving Compliance

Prepared by
Small Business and Environmental Assistance Division

SFR-054/02
November 2002
Robert J. Huston, Chairman
R. B. “Ralph” Marquez, Commissioner
Kathleen Hartnett White, Commissioner
Margaret Hoffman, Executive Director

This report is published as required by the Waste Reduction Policy Act.

Authorization to use or reproduce any original material contained in this publication—that is, not obtained from other sources—is freely granted. The commission would appreciate acknowledgment. Copies of this publication are available for public use through the Texas State Library, other state depository libraries, and the TCEQ Library, in compliance with state depository law. For more information on TCEQ publications, call 512/239-0028 or visit our Web site at:

www.tceq.state.tx.us/publications

Published and distributed by the
Texas Commission on Environmental Quality
PO Box 13087
Austin TX 78711-3087

The Texas Commission on Environmental Quality was formerly called the Texas Natural Resource Conservation Commission.

The TCEQ is an equal opportunity/affirmative action employer. The agency does not allow discrimination on the basis of race, color, religion, national origin, sex, disability, age, sexual orientation or veteran status. In compliance with the Americans with Disabilities Act, this document may be requested in alternate formats by contacting the TCEQ at 512/239-0028, Fax 239-4488, or 1-800-RELAY-TX (TDD), or by writing P.O. Box 13087, Austin, TX 78711-3087.
## Contents

### Tables

- Executive Summary ................................................................. 1

### Figures

- Introduction ........................................................................... 3
  - About This Report .............................................................. 3
  - Pollution Prevention ........................................................... 3
  - Division Description ........................................................... 3
  - Agency Name Change ........................................................... 4
  - Commonly Used Acronyms .................................................. 4

### Industrial Pollution Prevention Programs

- P2 Planning and Reporting ...................................................... 7
- Site Assistance Visits ............................................................. 8
- Border P2 ............................................................................. 10
- P2 at Federal Facilities .......................................................... 11

### Innovative Programs

- Clean Texas ............................................................................ 13
- Environmental Management Systems .................................... 16
- Tax Relief for Pollution Control Property ............................... 17
- Consumer P2 ......................................................................... 17
- Commute Solutions ............................................................... 19

### Small Business and Local Government Assistance

- General Assistance ............................................................... 21
- Compliance Assistance Visits ............................................... 22
- Compliance Commitment Partnership Program ...................... 23
- Texas EnviroMentor Program ............................................... 23
- Special Projects .................................................................... 23
- New Advisory Committee ..................................................... 24
- Rules Update ......................................................................... 25
Marketing Compost, Industrial By-Products, and Recyclables
Large-Scale, Centralized, and Agricultural Compost .......................... 27
Resource Exchange Network for Eliminating Waste .......................... 28
Texas Recycled and Recycled Texas Online ........................................ 29
Workplace Recycling ......................................................................... 30
1st Choice Products .......................................................................... 31
Recycled-Content Newsprint Survey .................................................. 32

Collection and Disposal Opportunities
Agricultural Waste Pesticide Collections ........................................ 33
Household Hazardous Waste Management ....................................... 33
Texas Country Cleanups ................................................................... 33
Lake and River Cleanups .................................................................. 34

Workshops, Seminars, and Conferences
Regulatory Workshops and Seminars ............................................. 37
P2 Workshops .................................................................................. 38
Small Business and Local Government Workshops ......................... 38
Large-Scale Composting Workshops ................................................ 39
Special Workshops ........................................................................... 40
Environmental Trade Fair and Conference ....................................... 41
Clean Texas Conference .................................................................. 42

Environmental Education and Public Awareness
Teaching Environmental Sciences .................................................... 43
YardWise ......................................................................................... 44
Message of the Month and Environmental Information Line ............ 45
Nonpoint Source Pollution Public Education Campaign .................. 46

Awards and Special Events
Pollution Prevention Week ............................................................... 49
Texas Recycles Day .......................................................................... 49
Texas Environmental Excellence Awards ......................................... 50

Special Partnerships ........................................................................ 51
Goals for Next Biennium

- Environmental Management Systems .................................................. 53
- Performance-Based Regulation ............................................................... 54

Appendixes

- Appendix 1 - SBEA Organizational Chart ............................................... 56
- Appendix 2 - List of Legislative Mandates .............................................. 57
- Appendix 3 - List of Advisory Committees ............................................ 57
- Appendix 4 - External Recognition of SBEA ............................................ 58
- Appendix 5 - Notable SBEA Publications .............................................. 59
Tables

Table 1 - Reductions Reported by Industrial Facilities Using a Five-year P2 Plan ... 8
Table 2 - Total Reductions Reported from Technical Assistance (from 1993 to 2002) ... 9
Table 3 - Total Cost Savings Reported from Technical Assistance (from 1993 to 2002) 10
Table 4 - Total Savings Reported from Border P2 Assistance (from 1993 to 2002) ... 11
Table 5 - 1st Choice Purchases by State Entities (FY01) ........................................ 31
Table 6 - Number of Compliance-oriented Workshops and Seminars .................... 37
Table 7 - Background and Feedback from TES Participants ................................. 43

Figures

Figure 1 - Clean Texas Membership by Level ........................................... 13
Figure 2 - Number of Clean Texas Members and Forums By Region .................. 15
Figure 3 - Average Emissions Saved by TCEQ Teleworkers in FY02 (in tons) ........ 19
Figure 4 - Number of SBLGA General Requests for Assistance (by fiscal year) .... 21
Figure 5 - Number of SBLGA Compliance Assistance Visits (by fiscal year) ....... 22
Figure 6 - Amount of Materials Exchanged through RENEW ......................... 28
Figure 7 - Number of RENEW Listings and Exchanges ................................. 29
Figure 8 - Amount of Newsprint with Recycled Content .................................. 32
Figure 9 - Recycling and Disposal Collections (Fiscal Year 2001) .................... 34
Figure 10 - Recycling and Disposal Collections (Fiscal Year 2002) ................... 35
Figure 11 - Number of Attendees and Exhibitors at Annual Trade Fair .............. 41
Figure 12 Most Critical Time for Science Education (TES Participants) .......... 44
Figure 13 Attendance and Contact Hours for TES Participants ......................... 44
Figure 14 Texas Recycles Day Outcomes ..................................................... 50
EXECUTIVE SUMMARY

As a liaison with citizens, businesses, industries, local governments, the public, and others, the Small Business and Environmental Assistance Division (SBEA) has successfully performed its mandated functions to prevent pollution, conserve natural resources, and promote and encourage compliance with Texas Commission on Environmental Quality (TCEQ) rules and regulations.

During fiscal years 2001 and 2002, SBEA responded to an increasing demand for technical and on-site assistance from regulated entities including small businesses and governmental entities in both Texas and Mexico by:

- helping industrial facilities reduce the amount of hazardous waste generated by more than 5.6 million tons and the amount of toxic chemicals used by more than 151,000 tons (over the last five years) by assisting them with pollution prevention planning;

- helping industrial facilities reduce hazardous waste by 139,000 tons (between 1993 and 2002)—which saved them more than $178 million annually in environmental costs—through on-site technical assistance in Texas and Mexico

- responding to more than 10,000 calls from small businesses and local governments and coordinating almost 600 site visits to answer questions on compliance;

- diverting more than 14.5 million tons of reusable waste away from landfills in ongoing transactions via an exchange network;

- successfully marketing more than 250,000 cubic yards of compost from the Bosque/Leon River area through large-scale composting programs;

- promoting the purchase of $20 million of environmentally preferrable products in state agencies through 1st Choice Products;
- **collecting** more than 328 tons of *agricultural waste pesticide*, 2.1 million tons of *household hazardous waste* through just two of four major statewide collection programs;

- **training** more than 10,000 *small businesses* and *local governments* in workshops and presentations aimed specifically at those sectors; plus 6,000 *regulated entities* at various workshops and seminars and another 3,200 attendees at our annual trade fair and conference;

- **equipping** almost 300 *teachers* (of students in kindergarten to 12th grade) to teach environmental subjects to their students;

- annually **recognizing dozens of Texans** whose select projects conserve natural resources and prevent pollution;

- **training** more than 60 *municipalities* to educate and pass on their training as Master Composters thereby enabling communities to be environmental stewards; and

- **forging partnerships** with federal, state, and local governmental entities; industries and businesses of all sizes; and nonprofit groups and communities to help promote or sponsor workshops, events, and innovative programs (such as Clean Texas and environmental management systems).

Throughout the biennium, SBEA continues to undertake new functions as directed by the 77th Legislature and Sunset Advisory Commission, such as *environmental management systems* and *performance-based regulation*, both of which require working closely with both regulated entities and TCEQ regulatory programs.
INTRODUCTION

The Small Business and Environmental Assistance (SBEA) division helps customers prevent pollution, conserve resources, achieve compliance with regulations, as well as educate them on diverse environmental issues, and promote the conservation of natural resources through partnerships in Texas and Mexico.

About This Report

Primarily intended for legislators, this report updates the progress of all the mandated programs that SBEA administers. For a list of the mandates, see the appendix.

The information is presented by function rather than by section. However, each chapter identifies the section that administers the programs. Refer to the division’s organizational chart to see which programs each section administers.

Pollution Prevention

In this report, the term “pollution prevention” may be used in different contexts:

- a broad term related to actions that prevent pollution and minimize the amount of waste generated
- a strategy that encourages actions that prevent pollution.

Division Description

SBEA is comprised of three sections: Pollution Prevention and Industry Assistance (PPIA), Small Business and Local Government Assistance (SBLGA), and Event Coordination and Education (ECE).

These sections offer the following services to small businesses, governmental entities, industries, manufacturers, agricultural operations, students and academia, and anyone interested in environmental stewardship:

- free, technical assistance on site and through telephone hotlines
- resources and assistance for regulatory compliance
- assistance on pollution-prevention planning and reporting
- seminars and workshops on compliance and pollution prevention topics
- assistance on environmental management systems, tax exemptions for pollution control equipment, and other innovative programs, practices, and technologies
- resources and assistance to market recycled/recyclable and compost products
- opportunities and resources for environmental education
- awards and special events to recognize environmental leadership
- recycling and disposal opportunities for urban, rural, and agricultural communities
- voluntary programs, advisory committees, and partnerships encouraging public participation

**Agency Name Change**

SBEA has experienced minimal effect from this change. For more information on the name change, see the official notice in the August 30, 2002, *Texas Register* or the agency’s Web site at www.tceq.state.tx.us.

On September 1, 2002, the Texas Natural Resource Conservation Commission (TNRCC) formally changed its name to the Texas Commission on Environmental Quality (TCEQ). Required by Sunset legislation (House Bill 2912), it is shorter and gives people a better sense of the agency's purpose. Plus, it's more consistent with what other states are calling their environmental agencies.

**Commonly Used Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP</td>
<td>Compliance Advisory Panel</td>
</tr>
<tr>
<td>ECE</td>
<td>Event Coordination and Education</td>
</tr>
<tr>
<td>EMS</td>
<td>environmental management system</td>
</tr>
<tr>
<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>FY</td>
<td>fiscal year</td>
</tr>
<tr>
<td>HHW</td>
<td>household hazardous waste</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Assistance Program</td>
</tr>
</tbody>
</table>
INDUSTRIAL POLLUTION PREVENTION PROGRAMS

This section reports on data for these pollution prevention (P2) programs in the PPIA section:
- P2 Planning and Reporting
- Site Assistance Visits
- Border P2
- P2 at Federal Facilities

P2 Planning and Reporting

Staff provide technical assistance and guidance documents to help facilities comply with the Waste Reduction Policy Act (WRPA) of 1991, a P2 planning law that applies to facilities and businesses that generate hazardous waste or release specific toxic chemicals into the environment. Facilities are required to:

- Prepare a five-year P2 plan for source reduction/waste minimization (SR/WM)
- Submit an executive summary of the plan, and
- Report annually on pollution prevention activities.

Reducing Pollution and Saving Money with P2 Planning

Many facilities benefit from going through the mandated P2 planning process and report both environmental benefits and cost savings.

- An herbicide manufacturing plant in Houston identified $2 million worth of copper it could recover from its sludge; by recovering it the plant permanently eliminated the chance of a leak contaminating state waters.
- An aluminum processing plant in Waxahachie reuses its old painting materials and blends them into new paints. It reduced its air emissions and use of raw materials enough to save $98,000 annually.
- An aircraft maintenance service in Abilene computerized its inventory system and used their paint more efficiently. They reduced waste generation by almost 14 tons per year, while tripling production and saving more than $65,000 per year.
- An Austin manufacturer of semiconductor equipment installed a recycling system that eliminated disposal of toxic coolant materials by 34,000 pounds and resulted in enough savings that the project paid for itself in less than three months.
As part of the planning process, the largest generators annually report the amount of pollution they would have generated if they had not implemented a P2 program. Since 1993, these facilities have reported reducing more than 78.5 million tons of hazardous waste and 414,656 tons of toxic chemicals at the source.

Table 1 shows progress for facilities over the most recent five-year planning cycle.

Table 1 Reductions Reported by Industrial Facilities Using a Five-year P2 Plan

<table>
<thead>
<tr>
<th>Reporting Year</th>
<th>Number of Facilities Reporting</th>
<th>Hazardous Waste (tons)</th>
<th>Toxic Chemicals (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>970</td>
<td>1,757,915</td>
<td>31,161</td>
</tr>
<tr>
<td>1998</td>
<td>779</td>
<td>1,214,634</td>
<td>13,954</td>
</tr>
<tr>
<td>1999</td>
<td>627</td>
<td>467,393</td>
<td>28,047</td>
</tr>
<tr>
<td>2000</td>
<td>996</td>
<td>691,097</td>
<td>34,266</td>
</tr>
<tr>
<td>2001</td>
<td>1002</td>
<td>3,508,749</td>
<td>44,385</td>
</tr>
<tr>
<td>Five-year Total</td>
<td></td>
<td>5,666,888</td>
<td>151,813</td>
</tr>
</tbody>
</table>

For the past three years, TCEQ has made available online annual reporting over the Internet. Within one year, compliance with annual reporting requirements increased 30 percent. This trend may indicate that by making it easier to report people will be more likely to comply with pollution prevention planning requirements.

**Site Assistance Visits**

TCEQ staff offer technical assistance and comprehensive training to the regulated community, as required by the WRPA. These site assistance visits (SAVs) help facilities and businesses reduce pollution and save money.

Each facility visited receives a written report with options that can prevent or reduce pollution. Determine site-specific options for each facility visited. Facilities can choose to implement whatever options they wish and are under no obligation to implement any of the options identified by staff.
Facilities have been reporting the outcomes from the P2 projects they implemented as a result of SAVs and workshops (see Table 2). Since 1993, approximately 260 facilities have implemented 848 projects, with 36 facilities reporting on 93 projects in FY02 alone.

### Table 2 Total Reductions Reported from Technical Assistance (from 1993 to 2002) \(^1\)

<table>
<thead>
<tr>
<th>Type of Reduction</th>
<th>Total Amount Reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous waste reduced</td>
<td>139,667 tons</td>
</tr>
<tr>
<td>Nonhazardous waste reduced</td>
<td>425,345 tons</td>
</tr>
<tr>
<td>Water conserved (^2)</td>
<td>1.9 billion gallons</td>
</tr>
<tr>
<td>Electricity conserved (^2)</td>
<td>445.3 million kilowatt hrs.</td>
</tr>
<tr>
<td>Particulate matter (PM10) reduced (^2)</td>
<td>3,623 pounds</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC) reduced (^2)</td>
<td>1.2 million pounds</td>
</tr>
</tbody>
</table>

\(^1\) Facilities annually report these amounts, which include those reported from the Border P2 Program (see the following section.)

\(^2\) Facilities began reporting these reductions more regularly over the last few years.

These projects also resulted in more than $178 million annually in cost savings (see Table 3).
Table 3: Total Cost Savings Reported from Technical Assistance (from 1993 to 2002) ¹

<table>
<thead>
<tr>
<th>Type of Reduction</th>
<th>Total Amount Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous waste</td>
<td>$70,445,727</td>
</tr>
<tr>
<td>Nonhazardous waste</td>
<td>$56,608,810</td>
</tr>
<tr>
<td>Water conserved ²</td>
<td>$4,240,829</td>
</tr>
<tr>
<td>Electricity conserved ²</td>
<td>$18,895,492</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC) reduced ²</td>
<td>$8,673,135</td>
</tr>
</tbody>
</table>

¹ Facilities annually report these amounts, which include those reported from the Border P2 Program (see the following section.)

² Facilities began reporting these reductions more regularly over the last few years.

In FY02, facilities were reporting on 15 water projects, 10 electricity, 14 hazardous waste, 32 nonhazardous waste, 11 volatile organic compounds (VOCs), and the remainder were other types of waste reduction categories.

For information on compliance-oriented site visits, refer to the Small Business and Local Government Assistance section.

**Border P2**

The SBEA Border P2 program is vital to the agency’s environmental initiatives along the Texas-Mexico border. Staff provide technical assistance and training on pollution prevention and recycling issues, and work with the maquiladora industry to improve air and water quality, conserve water, and generate less waste, thereby reducing the need to return waste to or through Texas.

A maquiladora is a foreign-owned plant located in Mexico that receives tariff-free raw materials from the plant’s home country then ships its products back to the home country for sale.

Table 4 shows the cumulative results reported by maquiladoras since the program began.
Table 4 - Total Savings Reported from Border P2 Assistance (from 1993 to 2002)  

<table>
<thead>
<tr>
<th>Type of Reduction</th>
<th>Total Amount Reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous waste</td>
<td>14,123 tons</td>
</tr>
<tr>
<td>Nonhazardous waste</td>
<td>82,676 tons</td>
</tr>
<tr>
<td>Water conserved</td>
<td>416 million gallons</td>
</tr>
<tr>
<td>Electricity conserved</td>
<td>445.9 million kilowatt hrs.</td>
</tr>
<tr>
<td>PM10 reduced</td>
<td>3,323 pounds</td>
</tr>
<tr>
<td>VOCs reduced</td>
<td>89,548 pounds</td>
</tr>
</tbody>
</table>

1 These amounts are included in the total amounts presented in the previous section on Site Assistance Visits.

2 Facilities began reporting these reductions more regularly over the last few years.

For more information on this issue, refer to the *State of the Rio Grande and the Environment of the Border Region* (SFR-035C).

**P2 at Federal Facilities**

SBEA staff provide technical assistance to military and federal facilities aimed at reducing waste and assisting these facilities design and implement environmental management systems and sustainable operations.

In FY02, the TCEQ renewed its partnership—which began in 1997—with the U.S. Department of Defense (DoD). In a ceremony in San Antonio, more than a dozen military entities signed the revamped charter for the Texas Environmental Partnership (formerly the Texas Pollution Prevention Partnership).

Some of the organizations who signed the charter include the:

- U.S. Environmental Protection Agency (EPA) Region VI
- U.S. Department of Defense
- Texas Army National Guard
- NASA-Johnson Space Center
U.S. Department of Energy in Texas

Partners expanded their focus beyond just pollution prevention and waste reduction to all environmental and compliance issues (such as environmental management systems and sustainability).
INNOVATIVE PROGRAMS

This section reports data for these general pollution prevention (P2) programs under the Pollution Prevention and Industry Assistance (PPIA) section:

- Clean Texas Program
- Environmental Management Systems
- Tax Relief for Pollution Control Property
- Consumer P2
- Commute Solutions

See the Industrial Pollution Reduction section for data related to industrial and border P2 programs.

Clean Texas

Clean Texas is about creating partnerships—among businesses, industries, governments, and organizations—that foster good relationships and reward environmental performance beyond compliance. Members join at different levels (Advocate, Partner, or Leader) and get statewide support.

Staff revamped the now 10-year-old program. In February 2001, 131 charter members joined Clean Texas. Since then membership has grown 56 percent with a total of 208 members at the end of FY02 (see Figure 1).

Figure 1 Clean Texas Members by Level (in percentages)
SBEA provides technical assistance, printed materials, resources, and networking opportunities for members who commit to specific goals.

Networking opportunities occur at an annual conference and at forums throughout the state. See Figure 2 for the number of members by region and the number of networking forums held throughout the state.

For more information on this program, refer to the *Clean Texas Progress Report* (GI-283) or go to www.cleantexas.org.
Northwest
Members = 12
Forums = 2

West Central
Members = 2
Forums = 0
(scheduled for FY03)

East
Members = 5
Forums = 1

West
Members = 3
Forums = 0
(scheduled for FY03)

South Central
Members = 63
Forums = 2

Gulf Coast
Members = 53
Forums = 2

Lower Border
Members = 5
Forums = 0
(scheduled for FY03)
Environmental Management Systems

House Bills 2997 and 2912 directed the TCEQ to adopt a comprehensive program that provides regulatory incentives to encourage the voluntary use of environmental management systems (EMSs) by regulated entities, state agencies, local governments, and others.

Staff are working closely with other divisions and have accomplished these tasks:

- **developed rules** to implement the program (the Commission adopted them in December 2001 under Chapter 90, Regulatory Flexibility, Subchapter C: Regulatory Incentives for using EMSs;

- established a **stakeholder group** to be part of the rules process and provide ongoing input on the EMS program;

- developed an **incentives package** (such as credit under the compliance history rule, reduced fees for training, and exemptions from P2 planning) to offer the regulated community;

- integrated EMSs into the **compliance history rule** by providing a 10 percent factor for an TCEQ-approved EMS, which is a “mitigating factor” on a case-by-case basis for moving a company from a poor to average rating;

- integrating EMSs into the **penalty policy** that the Commission adopted in August 2002, which provides a 10 percent penalty reduction for entities that have an EMS in place for more than one year;

- **trained** Clean Texas members, which continues into FY03, as part of the incentives package;

- informed over 1,000 people statewide about the state’s EMS program through presentations;

- signed a **Memorandum of Agreement with the EPA** to integrate the Texas program with the National Environmental
Performance Track, which offers federal incentives;

- trained staff from various TCEQ offices, as International ISO14000 Lead Auditors of EMSs;
- conducted mock audits at the University of Texas MD Anderson Cancer Center in Houston, Sony Electronics in San Antonio, Bayer Corporation in Baytown, and Rohm and Haas in Deer Park; and
- obtained commitments from five small- to medium-sized businesses on the border to help develop pilot EMSs

The 77th Legislature specifically mandated that TCEQ publish EMS models for small businesses and local governments, which staff are currently drafting. More information is available at www.AboutTexasEMS.org.

Tax Relief for Pollution Control Property

A state constitutional amendment provides a tax incentive to individuals, companies, and political subdivisions for property used for pollution control. The TCEQ is responsible for determining if property meets the requirements for receiving a tax exemption.

PPIA staff are charged with reviewing Prop2 applications:

- more than 1,400 applications were submitted in this biennium (to date, approximately 6,268 applications have been reviewed)
- most of the applications, 46 percent of them, were for air pollution equipment (scrubbers, dust collectors, emission monitors, etc.)

Consumer P2

PPIA staff developed a Consumer Pollution Prevention (P2) workshop in which attendees learn how their personal behaviors—at work and at home—affect the environment and how they can change some of the aspects of their lives (such as driving, energy consumption, and purchasing habits) to lessen the environmental impact they make while saving money. The three workshops—Houston Advanced Research
Center, NASA-Johnson Space Center, and BP Advanced Chemicals Chocolate-Bayou Facility—were a stunning success.

The majority of attendees, who were surveyed afterward, said they expected to change their behavior. Many of them applied what they learned to personal projects and reported their outcomes to SBEA staff.

**Reported Results From the HARC Session**
- cost savings of $7,500 (an average of over $1,000 per person)
- conserving 5,440 kilowatt hours per year of electricity
- conserved 128 gallons of gasoline per year
- reducing 9,000 pounds per year of CO2 emissions

**Reported Results From the NASA Session**
- cost savings of nearly $10,000 (an average of about $2,000 per person)
- conserving 200 kilowatt hours per year of electricity
- conserving 124 gallons of gasoline per year
- reducing about 3,000 pounds per year of CO2 emissions
- reducing the amount of solid waste they generated

**Projects Resulting from the Workshops**
- purchasing energy-efficient appliances
- eliminating the use of extra appliances
- installing solar screens
- eating out less
- reducing driving
- eliminating dry cleaning
- eliminating credit cards
- increasing savings by cutting personal spending (buying less)
Commute Solutions

PPIA staff oversee the Commute Solutions program, which focuses on actions people can take to reduce the number of vehicles on Texas highways and protect air quality.

This program organized these activities:

- approximately 250 employees attended two Commute Solutions Fairs, which provided information on teleworking, mass transit options, and carpool and vanpools.
- volunteers (agency-wide) established the RideShare database, which employees use to find others with similar transportation needs (facilitating carpool and vanpools); the database currently has approximately 200 listings.
- TCEQ’s 15 vanpools are the largest fleet in the Capital Metropolitan Transportation Authority service area.
- PPIA staff oversee the agency’s telework program, with 109 employees who teleworked 4,163 days in FY02.

Figure 3 estimates the average amount (in tons) of emissions that teleworkers are saving.

**Figure 3 Average Emissions Saved by TCEQ Teleworkers in FY02 (in tons)**
Staff estimate that TCEQ employees reduced driving by more than 200,000 miles, cut gasoline consumption by more than 11 million gallons, and saved an average of $122 per teleworker.
SMALL BUSINESS AND LOCAL GOVERNMENT ASSISTANCE

As mandated by the state’s Water Code and the federal and state Clean Air Acts and the state’s Solid Waste Disposal Act, the Small Business and Local Government Assistance section (SBLGA) targets small businesses and local governments, which typically are unaware of state and federal regulations.

SBLGA provides technical assistance on air, water, waste, or pollution prevention issues to approximately 50,000 small businesses and local governments.

This assistance is independent of the inspections performed by TCEQ’s Office of Compliance and Enforcement.

General Assistance

Over the biennium, staff—stationed both in Austin and all TCEQ regional offices—responded to more than 10,000 inquiries via its toll-free hotline and in-office visits.

What’s a “Small Business”? A small business is one that is independently owned or operated with 100 or fewer employees.

Figure 4 shows the increasing demand for assistance.
Note that inquiries increased 30 percent from 4,185 in FY 2001 to 6,352 in FY 2002. For more information on SBLGA workshops, go to the
Workshops, Seminars, and Conferences section.

SBLGA staff have also published several *industry-specific* guides and other materials to educate small businesses and local governments on the various environmental issues facing them. See the appendix for a list of noteworthy publications SBEA produced this biennium.

**Compliance Assistance Visits**

SBLGA coordinates confidential, one-on-one technical assistance for local governments and individual businesses to improve compliance and prevent or reduce the need for enforcement.

Staff have coordinated 346 visits in FY02. Figure 5 shows the total number of site visits performed since FY98.

![Figure 5 Number of Compliance Assistance Visits (by fiscal year)](image)

After a site visit—performed by a consultant who is contracted by the TCEQ—the business or local government receives specific recommendations on how to achieve full compliance and possibly reduce regulatory burden while preventing the generation of pollution and waste.

Implementing the recommendations is voluntary. However, if participants correct all compliance issues that were identified, they may qualify for the Compliance Commitment Partnership (C2) program.
Compliance Commitment Partnership Program

When a business or local government successfully corrects all deficiencies found during an assistance visit—and no new ones have occurred—it can be certified as a C2 partner.

A subsequent visit verifies that the business corrected all compliance issues. Then they receive a certificate exempting them from routine TCEQ inspections for one year. Agency inspectors can call SBLGA to verify that a certificate has been issued should they arrive for a routine inspection.

Currently, **20 businesses are C2 partners**; 17 of them were certified in FY02 alone.

Texas EnviroMentor Program

This volunteer mentoring program assists small businesses and local government officials in complying with environmental regulations. The program is designed to recruit qualified volunteer professionals, such as engineers, attorneys, and other consultants, to provide limited, free and confidential assistance.

Program results are as follows:

- EnviroMentors donated a total of **680 hours valued at approximately $54,300**
- SBLGA recruited 10 new EnviroMentors in FY02 boosting the number of volunteers to 84 in all areas of the state.

Special Projects

Of the many ongoing projects helping small business and local governments, the projects mentioned below stand out:

- **Liquid Waste:** Six entities have implemented or modified their grease management programs and two local governments developed ordinances to reduce overflows of sanitary sewers due to grease buildup, as a result of this ongoing project. Aimed at food service businesses, staff educated them on operating and maintaining grease traps, grit traps, and septic tanks by providing assistance, conducting workshops, and creating an English-Spanish poster depicting proper kitchen
practices relating to grease disposal.

- **Storm Water Permits:** Staff fielded questions from 900 callers and reached approximately 700 people through workshops and seminars now that TCEQ is issuing general permits through the Texas Pollutant Discharge Elimination System (TPDES), which is the state’s implementation of the federal program. **Upcoming** are general permits for small, regulated, municipal separate storm sewer systems (MS4s) and construction sites.

- **Wastewater Permits:** Approximately 208 of 244 (85 percent) small businesses and local governments successfully renewed their wastewater permits on time, as a result of ongoing assistance. Staff inform them when these permits are within 30 to 60 days of expiring and help them take action for renewal. This assistance prevents them unknowingly allowing their permits to expire and avoiding penalties and re-permitting.

### New Advisory Committee

The new Local Government Advisory Committee (LGAC) provides feedback on pending environmental rules and TCEQ policy changes that impact local governments and their constituents. LGAC enables them to participate in the agency’s rulemaking process.

As LGAC members, they have an opportunity to comment on changes in TCEQ policies. Among others, they have commented on these issues:

- Outdoor burning
- Storm water permits
- On-site sewage facilities
- Compliance history
- Environmental management systems
- Supplemental environmental projects (which allows those charged a penalty for an environmental violation to fund environmental projects in the community where the violation occurred)
Rules Update

As mandated, staff routinely update small businesses and local governmental entities through *The Advocate* (PD-006). This bulletin contains information on compliance and regulatory issues that affects them. Updates are mailed, as well as posted on the agency’s Web site. At the beginning of the fiscal year *The Advocate* provides a calendar of reporting deadlines and at the end, an index of articles by subject.
MARKETING COMPOST, INDUSTRIAL BY-PRODUCTS, AND RECYCLABLES

Mandated by the Texas Health and Safety Code (Chapter 361), SBEA’s Recycling Market Development program works to develop and expand recycling markets for communities, businesses, and institutions.

It provides various resources, training, and technical assistance in locating and accessing markets for recyclable materials, leveraging resources through public/private partnerships, and developing cooperative marketing systems.

This section summarizes the results from these programs, which are administered by the PPIA section:

- Large-Scale, Centralized, and Agricultural Composting
- Resource Exchange Network for Eliminating Waste
- Texas Recycled and Recycled Texas Online
- Workplace Recycling
- 1st Choice Products
- Recycled-Content Newsprint Survey

Large-Scale, Centralized, and Agricultural Compost

This program targets large composting operations for communities, companies, and farmers. SBEA staff provide:

- information on the environmental and economic benefits of composting,
- marketing assistance in the form of partnerships between compost producers and users state wide, and

Marketing Compost Helps Bosque/Leon River Watershed

One particular case study in successfully promoting large-scale composting helped an area that is dealing with water quality problems.

As part of a statewide compost initiative with EPA support, Texas Department of Transportation (TxDOT) districts that purchased compost from the Bosque/Leon River watershed in North Texas—an area with water quality issues and nonpoint source pollution caused by the density of dairy operations—became eligible for EPA grant reimbursements ($5 per cubic yard).

TxDOT agreed to buy a minimum of 200,000 cubic yards of composted dairy manure over three years. The rebates covered freight costs.
assistance in complying with composting regulations (including small dairies).

Over the past biennium, staff efforts have:

- marketed more than **366,000 cubic yards** of compost to landscapers, parks/recreational turf managers, and others; the majority went to the Texas Department of Transportation; and
- provided technical assistance at **44 site visits** (an increase from 8 visits in FY01 to 36 in FY02).

**Resource Exchange Network for Eliminating Waste**

The Resource Exchange Network for Eliminating Waste (RENEW) is a materials exchange network to promote the reuse or recycling of industrial wastes.

The online network is a marketing channel for industries, businesses, and governmental entities who want to sell surplus materials, by-products, and wastes to users who will reclaim or reuse them.

Since 1998, the RENEW program has documented **138 exchanges** of more than **112 million pounds** of materials (see Figure 6) that were reused.

![Figure 6 Amount of Materials Exchanged through RENEW](chart)

**Figure 6 Amount of Materials Exchanged through RENEW**

- FY98: 24.8
- FY99: 23.5
- FY00: 43.8
- FY01: 2.9
- FY02: 14.5

**pounds** of materials (see Figure 6) that were reused.
Overall, **99 percent** of the exchanges are **ongoing** and **saving** businesses more than **$3.7 million** in disposal costs (see Figure 6).

![Figure 7 Number of RENEW Listings and Exchanges](image)

RENEW publishes its listings of materials (both available and wanted) on the Internet giving RENEW a nation-wide market.

**Texas Recycled and Recycled Texas Online**

These programs market and materials and products made from recycled content thereby diverting waste that would likely go into landfills.

**Texas Recycled™**

Texas Recycled encourages the public to buy products made from recycled materials by Texas manufacturers. Manufacturers—whose products must contain minimum levels of recycled content—join the program and staff equip them with these tools:

- use of the Texas Recycled trademark on their products and packaging
- free banners, shelf-talkers, posters, and other materials to promote their products
- a free listing of their products on the Texas Recycled Web page (at www.texasrecycled.org).
- state-wide recognition in TCEQ advertising campaigns.

To date, 72 Texas businesses are members.
**Recycled Texas Online**

Recycle Texas Online is a directory of recyclers. Recycling businesses in Texas report the specific types of recyclable materials they handle. Listings are voluntary and free; and SBEA staff continuously updated them.

The directory allows the public to find recyclers by material, geographic region, and recycling activity (for example, collector, composter, processor). Similar to RENEW, people can use the directory to buy or sell recovered or recyclable material.

**Workplace Recycling**

This program provided technical assistance and other resources to public and private workplaces so they can enhance or establish waste reduction and recycling programs. During fiscal year 2002, staff began the pressing issue of **electronics recycling**.

SBEA staff are educating and assisting Texans on:

- how to find electronics recyclers,
- how to properly dispose of electronic equipment, and
- how to conduct community collections.

Numerous municipalities are facing the problem of proper disposal of computers and electronic devices. Not only do computer parts take up valuable landfill space, but they can contain hazardous materials. The EPA also is implementing initiatives on electronics recycling.

The city of Plano is conducting a pilot program to collect electronic equipment from households.

**Products Made by Texas Recycled Members**

- **Landscaping Materials** - compost, landscape edging, sand from glass, topsoil
- **Wood Products** - flooring, furniture, pallets, reclaimed lumber
- **Architectural & Building Products** - air conditioner pads, bricks, pavers, patio blocks, paint, decking, fencing, roof shingles
- **Roadway & Other Construction Products & Materials** - concrete or asphalt aggregate, road base expansion joint
**1st Choice Products**

The Recycling Market Development Board is charged with coordinating the recycling activities of all state agencies and pursuing an economic development strategy that focuses on the state's waste management priorities and development of recycling industries and markets. TCEQ’s 1st Choice Products is one of the board’s programs.

In October 2000, the state adopted rules to designate certain products made with recycled content as *1st Choice Products*. Texas state agencies and institutions of higher education shall opt to buy these products, when available, instead of their virgin, non-recycled-content counterparts.

In FY01, state entities spent more than $400 million on environmentally preferred products and services; more than $20 million of that amount was spend on 1st Choice Products (as shown in Table 5).

<table>
<thead>
<tr>
<th>Product</th>
<th>1st Choice Purchases</th>
<th>Alternate Purchases</th>
<th>Total Purchases</th>
<th>% of 1st Choice Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>motor oil</td>
<td>$1,621,860</td>
<td>$108,399</td>
<td>$1,730,259</td>
<td>93%</td>
</tr>
<tr>
<td>paper towels &amp; tissues</td>
<td>$5,315,834</td>
<td>$21,746</td>
<td>$5,337,580</td>
<td>99%</td>
</tr>
<tr>
<td>printing &amp; writing paper</td>
<td>$12,715,077</td>
<td>$2,042,303</td>
<td>$14,757,380</td>
<td>84%</td>
</tr>
<tr>
<td>envelopes</td>
<td>$893,664</td>
<td>$70,723</td>
<td>$964,387</td>
<td>92%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$20,546,435</strong></td>
<td><strong>$2,243,171</strong></td>
<td><strong>$22,789,606</strong></td>
<td><strong>89%</strong></td>
</tr>
</tbody>
</table>

Other board members include the Texas Building and Procurement Commission, Texas Department of Transportation, General Land Office, and Texas Department of Economic Development.
Recycled-Content Newsprint Survey

The Omnibus Recycling Act of 1991 requires major newspaper publishers to report their use of recycled-content newsprint. They report the amount of newsprint purchased by calendar year.

Over the last six years, more than 1,600 publishers/ printers purchased more than 3.7 million tons of newsprint. Reporters had to meet one of two goals by calendar year 2000:

- 30 percent of all newsprint purchased was recycled newsprint, statutorily
- 18 percent of recycled content, by fiber weight, in the overall total amount of newsprint purchased, as an alternative under agency rule
- total weight of newsprint purchased was recycled content.

Both these goals were exceeded: 36 percent of all newsprint purchased was recycled newsprint, and 22 percent of the total weight of newsprint purchased was recycled content (see Figure 8).

Figure 8 Amount of Newsprint with Recycled Content Purchased

Recycled newsprint contains at least 25 percent or more of recycled content; newsprint with recycled content is that in which the total amount purchased is at least 18 percent of recycled fiber.
COLLECTION AND DISPOSAL OPPORTUNITIES

As mandated, SBEA provides Texans a wealth of opportunities to dispose of waste, diverting it from landfills. These programs are administered by the Event Coordination and Education (ECE) section:

- Agricultural Waste Pesticide Collections
- Household Hazardous Waste Management
- Texas Country Cleanups
- Lake and River Cleanups

These events prevent contamination of surface waters, groundwater supplies, and wastewater treatment facilities; and discourage illegal dumping. See Figures 9 and 10 for the results of all of these programs.

Agricultural Waste Pesticide Collections

With support from the Texas Agricultural Extension Service, several river authorities, and the Texas Department of Agriculture, ECE organizes regional waste pesticide and household hazardous waste (HHW) collections for rural Texas. These organizations also support the Texas Country Cleanups.

The collections offer farmers and ranchers the opportunity to properly dispose of unwanted products that may pose a hazard to them, their families, and their surrounding farming and ranching community.

Household Hazardous Waste Management

ECE regulates HHW collection events and HHW facilities and provides technical assistance and educational materials to communities and organizations who wish to sponsor HHW events. These events are in addition to those ECE sponsors.

Texas Country Cleanups

These cleanups offer rural communities the opportunity to recycle used oil, used oil filters, and lead-acid batteries. These cleanups are often combined with agricultural waste pesticide collections and household hazardous waste collections to offer a comprehensive rural recycling and disposal opportunity.
Lake and River Cleanups

ECE contracts with Keep Texas Beautiful to help communities and organizations establish or enhance local lake and river cleanup programs.

Figure 9 Totals from Collection and Disposal Events (FY01)

Recycling & Disposal Collections
Fiscal Year 2001

FY ‘01 Collection Results

• Agricultural Waste Pesticide,
  15 events with a total of 678 participants collecting 179.5 tons.

• Household Hazardous Waste,
  116 events with a total of 33,353 participants collecting 1,272.16 tons.

• Texas Country Cleanup,
  34 events with a total of 2,071 participants collecting 27,426 containers, 2,900 tires, 32,218 gallons of used oil, 49,864 filters, and 2,903 batteries.

• Lake and River Cleanup,
  115 events with a total of 25,436 volunteers collecting 2,204.91 tons of trash.
Figure 10 Totals from Collection and Disposal Events (FY02)

Recycling & Disposal Collections
Fiscal Year 2002

FY '02 Collection Results

- **Agricultural Waste Pesticide**,
  14 events with a total of 953 participants collecting 149.25 tons.

- **Household Hazardous Waste**, 113 events with a total of 23,210 participants collecting 922.9 tons.

- **Texas Country Cleanup**, 45 events with a total of 1,634 participants collecting 29,393 containers, 0 tires, 35,686 gallons of used oil, 70,344 filters, and 4,813 batteries.

- **Lake and River Cleanup**, 113 events with a total of 22,271 volunteers collecting 646.49 tons of trash.
WORKSHOPS, SEMINARS, AND CONFERENCES

As mandated, SBEA organizes various workshops, seminars, and conferences to support pollution prevention, compliance, and networking opportunities for partnerships. This report presents data on all events SBEA coordinates, which includes these:

- Regulatory Workshops and Seminars
- P2 Workshops
- Small Business and Local Government Workshops
- Large Scale Composting Workshops
- Special Workshops
- Environmental Trade Fair and Conference
- Clean Texas Conference

Regulatory Workshops and Seminars

ECE coordinates air, water, and waste workshops and seminars for SBEA and other offices in the agency. They’re intended to educate all regulated entities on various compliance issues.

Table 6 demonstrates the success of these events on topics such as air emissions, water quality, waste management, on-site sewage facilities, and fleet operations.

Table 6 - Number of Compliance-oriented Workshops and Seminars

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Events *</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY00</td>
<td>33</td>
<td>4,183</td>
</tr>
<tr>
<td>FY01</td>
<td>28</td>
<td>3,254</td>
</tr>
<tr>
<td>FY02</td>
<td>20</td>
<td>2,750</td>
</tr>
</tbody>
</table>

* These counts exclude the annual trade fair and the Clean Texas conference
P2 Workshops

PPIA staff conduct P2 workshops to help businesses and industries save money and reduce waste while meeting SR/WM planning and reporting requirements. Permanent Pollution Prevention Program (P4) workshops are eight-step training programs for organizations who want to involve employees in preventing pollution.

During the last biennium, staff conducted:

- a total of **128 workshops**, and
- a total of **168 presentations**.

Small Business and Local Government Workshops

Staff coordinate workshops and presentations targeting compliance issues specifically impacting governmental entities and small businesses. Events increased 18 percent over the last biennium.

Staff conducted:

- a total of 330 events with a **20 percent increase** from 150 in FY01 to 180 in FY02, and
- attendance totaled 10,000, which also **increased 50 percent** from 4,000 to 6,000 in FY01 and FY02, respectively.
- gave **330 workshops or presentations** to approximately 10,000 attendees.

New Workshops

Fleet Operations

Focusing on fleet operations, this workshop proved so popular that four additional workshops are scheduled in small metropolitan areas in FY03. The **five workshops** held across the state received the attention of more than **500 attendees**. That number excludes those people who attended it at the annual Environmental Trade Fair and Conference, which was a new session at the conference.

At these workshops, which cover air, water, and waste issues, facilities with fleet operations get:
- tips on increasing environmental compliance and reducing pollution,
- free guidance documents and videotapes, and
- one-on-one assistance

SBLGA staff and colleagues in the PPIA section coordinated efforts to provide these workshops.

**Rulemaking Training**

*Who Wants to be A Rule-ioniare?* trains small businesses in the TCEQ rulemaking process. Using a game-show theme, staff educate representatives of small businesses and local governmental entities on the agency’s process for making rules, and equips them to actively participate in the process.

Feedback was so positive that SBLGA now offers both basic (for new trainees) and advance sessions. Timely held before the upcoming legislative session, this workshop complements the SBLGA’s Rules Review Committee (which comments on proposed rules).

**Large-Scale Composting Workshops**

More than 2,800 people attended 50 workshops and presentations and 19 demonstrations on large-scale composting. While the number of these events remained steady, attendance more than doubled during the biennium with 891 attendees in FY01 and 1,923 in FY02.

Some of the topics addressed at demonstrations include:

- Using dairy manure compost (to improve water quality in watersheds)
- Using filter berms
- applying compost/mulch to Texas highway rights-of-way
- using compost and mulch on agricultural land
- using compost and mulch to conserve water

Staff have expanded their efforts by interacting with various professional and trade associations. For example, they staffed exhibit tables at conferences and arranged for organizations to grant continuing education credits to professional composters who attended SBEA workshops.
Special Workshops

**Excessive Emissions Workshops**

With air quality a continual issue in the state, PPIA responded with a new workshop specifically addressing unplanned, excessive air emissions at industrial facilities. Over the last two years, staff conducted **free** workshops in areas facing air quality issues. Almost **700 people** attended **6 workshops** in these areas:

- Beaumont
- Corpus Christi
- Laredo
- Midland
- San Antonio
- Tyler

Since the workshops, staff have been periodically following up with attendees, whose feedback indicate that the workshops were successful.

**International Border Workshop on Hazardous Materials**

With federal, state, and local support, SBEA hosted in-depth, two-day workshops—along the border—on storing and transporting hazardous materials.

These workshops were aimed at maquiladora and other companies that store hazardous materials or transport them into the state.

Simultaneously **translated** into Spanish, the workshops covered federal and state regulations on topics such as these:

- waste classification
- registration, reporting, inspections
- transporting and shipping documents
- labeling, placarding, and highway routes
- spill response and reporting
• handling, storage, and construction

Workshops were held in Brownsville, El Paso, Laredo, and McAllen in October 2001.

Environmental Trade Fair and Conference

This annual, three-day event features over a hundred hours of training—conducted by TCEQ experts and invited authorities from industry and academia—designed to assist everyone including local governmental officials, industry professionals, engineers, educators, and environmental consultants.

Figure 11. shows the increased attendance at this major event. Each exhibitor receive one conference registration so the number of attendees includes one for each exhibitor.

Continuing education credits are offered for environmental professionals. The exhibit hall features displays from the nation's top providers of environmental products and services.
Clean Texas Conference

This conference offers Clean Texas members a variety of training opportunities to help members meet their commitments.

Members use this event as a forum to:

- network with other members in their region to discuss common issues and share solutions, and
- learn about incentives and opportunities for sustainable solutions that benefit the bottom line.

Since its first conference last biennium, PPIA and ECE staff have organized two conferences (one each fiscal year).
ENVIRONMENTAL EDUCATION AND PUBLIC AWARENESS

This section summarizes the results from ECE’s environmental education programs including:

- Teaching Environmental Sciences
- YardWise
- Message of the Month and Environmental Information Line
- Nonpoint Source Pollution Public Education Campaign

Teaching Environmental Sciences

ECE’s Education team develops and coordinates K-12 resource materials and training programs including the Teaching Environmental Sciences (TES), a graduate credit course developed through local resources.

Table 7 contains a few responses from the teachers who attend the course.

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>FY01</th>
<th>FY02 *</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your student load?</td>
<td>6,357</td>
<td>12,867</td>
</tr>
<tr>
<td>What percentage of the students you teach are minority?</td>
<td>73%</td>
<td>49%</td>
</tr>
<tr>
<td>Is the information TES presented new to you? (“Yes” answers)</td>
<td>66%</td>
<td>82%</td>
</tr>
<tr>
<td>Will you use the materials [you received] from TES in your lessons? (“Yes” answers)</td>
<td>94%</td>
<td>98%</td>
</tr>
</tbody>
</table>

* Amounts and percentages for FY02 lacks data for just two TES course sessions.

Additionally, teachers gave their views on the appropriate time frame for teaching students about the sciences (see Figure 12).
Figure 12 The Most Critical Time for Science Education According to TES Participants

![Pie chart showing the critical time for science education according to TES participants. The categories are K to 3 (39.00%), 4 to 6 (39.00%), 7 to 8 (10.00%), High School (5.00%), College (0.00%), and N/A (7.00%).]

Over the biennium, a total of **279 teachers** received almost **1,200 hours** of instruction (see Figure 13) in 23 TES courses at **20 universities**.

Figure 13 Attendance and Contact Hours for TES Participants

![Bar chart showing attendance and contact hours for TES participants over FY01 and FY02.]

**YardWise**

The Texas legislature directed the TCEQ to create a program capable of diverting 15 percent of the waste disposed of in Texas through composting. In response, Yardwise is a program designed to increase awareness of the benefits of mulching and composting among local communities across the state.

Yardwise achieved these results:
- held six workshops for community coordinators,
- **certified** over 100 individuals as **Master Composters**,
- helped create Yardwise programs in 60 municipalities, and
- created a discussion group via electronic mail with 23 participants.

See the Special Programs and Partnerships section for a list of the partners that support and contribute to Yardwise.

**Message of the Month and Environmental Information Line**

The *Message of the Month* is a free packet containing reproducible materials for educating others on taking action to improve the environment. Also called *Environmental News You Can Use*, subscribers get a monthly packet of materials featuring a particular theme (water conservation, recycling, waste reduction, etc.).

Packets include items such as:
- sample news releases,
- fliers (“Stuffers”) to insert in payment envelopes
- public service announcements, and
- reproducible fliers that can be used to educate customers, suppliers, or employees on actions they can take to improve the environment.

To date, **721 subscribers** take advantage of the materials, an **increase of 25 percent** over the last biennium.

Another tool in this public education program is an environmental information line, **1-800-CLEANUP**. By dialing it, or using the companion Web site (www.1800cleanup.org), and entering their five-digit ZIP code, people can find local information on recycling, household hazardous waste collections, and other environmental resources.
These tools are popular according to records on usage:

- more than 9,652 callers have used the information line, and
- approximately 18,430 people have used the Web site.

**Nonpoint Source Pollution Public Education Campaign**

This campaign educates Texans about nonpoint source pollution, which is the largest cause of water pollution.

The campaign targets selected areas with impaired water bodies (Total Maximum Daily Load or TMDL) and helps educators, cities, councils of governments, and river authorities in those areas participate in the campaign. ECE staff provide assistance with public relations, promotional events, multimedia coverage, and other strategies communities can use.

**What is nonpoint source pollution?**

Nonpoint source pollution (NPS) comes from diffuse pollution sources. That is, pollution without a single point of origin or not introduced into a receiving stream from a specific outlet. The pollutants are generally carried off the land by storm water. Common nonpoint sources are agriculture, forestry, urban, mining, construction, dams, channels, land disposal, saltwater intrusion (the invasion of fresh surface or ground water by salt water), and city streets.

With the slogan "Please Don't Feed The Storm Drain," staff employ these tools:

- distributing posters, brochures, door hangers;
- placing statewide television and radio spots;
- participating in special events and activities held in targeted TMDL areas;
promoting the campaign in schools; and
partnering with corporate, government, and nonprofit groups to produce public service announcements and special programming for TV, radio, and print media.

Campaigns are being launched in Austin, Fort Worth/Dallas, San Antonio, Houston, Corpus Christi, and the Rio Grande Valley.
AWARDS AND SPECIAL EVENTS

SBEA recognizes environmental achievements and participates in special promotions that drive home environmental issues. This section summarizes these activities:

- Pollution Prevention Week
- Texas Recycles Day
- Texas Environmental Excellence Awards

Pollution Prevention Week

The PPIA section participates in National Pollution Prevention Week, held the third week in September. Throughout this week, cities and businesses across the state and country highlight their achievements to prevent pollution and reduce waste, expand on current pollution prevention efforts, and create new initiatives.

In Texas, PPIA encouraged all Texans to incorporate P2 practices into their daily activities year round by:

- distributing posters and publications with P2 tips,
- promoting P2 Week in the Message of the Month,
- providing P2 resources on the agency Web site, and
- encouraging and guiding organizations and communities that sponsored P2 Week events

Texas Recycles Day

Each November 15, communities across the state participate in this event. Communities highlight recycling opportunities or inform citizens of new recycling and waste reduction programs and educate the public about recycling and composting.
ECE staff boosted media coverage of events, which climbed by more than **50 percent** (see Figure 14). For more information, go to Texas Recycles Day Web site at www.TexasRecyclesDay.org.

![Figure 14 - Texas Recycles Day Outcomes](image)

**Texas Environmental Excellence Awards**

ECE staff recognized successful environmental projects, as mandated by WRPA, with Texas Environmental Excellence Awards (TEEA). Each year awards are presented in a variety of categories to honor those individuals, organizations, schools, and businesses that have created successful programs to preserve and protect the Texas environment.

In the last two years:

- SBEA presented **24 awards** selected from more than **330 applications**, and
- honored the winners at banquets with more than **700 attendees**.
**SPECIAL PARTNERSHIPS**

Many of SBEA’s successes are due to the key partnerships with public and private entities. A few of them are listed in the table below.

<table>
<thead>
<tr>
<th>This Partner...</th>
<th>Helps SBEA...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Cell Partnership</td>
<td>to educate and promote alternative energy sources</td>
</tr>
<tr>
<td>Texas Clean Air Campaign</td>
<td>to educate and motivate Texans to prevent air pollution</td>
</tr>
<tr>
<td>Texas Environmental Partnership</td>
<td>to implement pollution prevention practices and strategies in federal facilities including military bases</td>
</tr>
<tr>
<td>Texas Agricultural Extension Service</td>
<td>to support the training of Master Composters (YardWise); and</td>
</tr>
<tr>
<td></td>
<td>to support collections of agricultural waste pesticides</td>
</tr>
<tr>
<td>Regional Councils of Governments</td>
<td>to support programs that prevent air pollution</td>
</tr>
<tr>
<td></td>
<td>to host and promote YardWise workshops in their communities</td>
</tr>
<tr>
<td></td>
<td>to support collections of agricultural waste pesticides</td>
</tr>
<tr>
<td>Keep Texas Beautiful</td>
<td>to promote YardWise workshops</td>
</tr>
<tr>
<td>Recycling Alliance of Texas</td>
<td>to support YardWise workshops</td>
</tr>
<tr>
<td></td>
<td>to assist with the marketing of compost and recyclable/recycled products in Texas</td>
</tr>
<tr>
<td>Lower Rio Grande Valley Development Council</td>
<td>to support the Clean Texas Program</td>
</tr>
<tr>
<td>This Partner...</td>
<td>Helps SBEA...</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>U.S. Environmental Protection Agency</td>
<td>to support the Clean Texas Leader Program (via a Memorandum of Agreement)</td>
</tr>
<tr>
<td>Texas Department of Transportation</td>
<td>to support YardWise workshops</td>
</tr>
<tr>
<td></td>
<td>to promote recyclable/recycled products</td>
</tr>
<tr>
<td></td>
<td>to co-sponsor the “Drive Clean Across Texas” public education campaign on air quality.</td>
</tr>
<tr>
<td></td>
<td>to co-host the International Border Workshop on Hazardous Materials</td>
</tr>
<tr>
<td>National Pollution Prevention Roundtable</td>
<td>to promote the exchange of P2 techniques among states.</td>
</tr>
</tbody>
</table>
GOALS FOR THE NEXT BIENNium

SBEA staff will play a key role in executing new mandates assigned during the last legislative session. In tandem with other TCEQ divisions, SBEA will continue or initiate work in these areas:

- Environmental Management Systems
- Performance-Based Regulation

Environmental Management Systems

House Bills 2997 and 2912 require the TCEQ to adopt comprehensive program that provides regulatory incentives to encourage the voluntary use of environmental management systems (EMSs) by regulated entities, state agencies, local governmental entities, and others.

SBEA staff have already made significant progress on EMSs, including developing regulatory incentives, introducing over 1,000 individuals in Texas to EMSs, and integrating EMSs into the regulatory programs as required by the bills.

Future goals call for marketing and assistance efforts to bring entities into innovative programs through EMSs and Clean Texas. Through these efforts, the program can demonstrate successes in pollution reduction and cost savings that will allow the development of additional incentives.

The agency is also planning to develop an internal EMS program to find ways to increase efficiency the TCEQ. Additionally, the TCEQ plans to integrate EMSs into the permitting process as directed by the legislature.

TCEQ Selected as a National EMS Resource

The EPA selected TCEQ as one of eight EMS Local Resource Centers. These Centers will help local governments adopt environmental management systems to improve their overall environmental performance and compliance and meet environmental goals.

The other centers include Purdue University, University of Wisconsin, University of Florida, Georgia Institute of Technology, University of Massachusetts at Lowell, Virginia Tech University, and The Zero Waste Alliance in Portland, Oregon.
Performance-Based Regulation

House Bill 2912 (HB2912) mandated the TCEQ to develop a strategically directed regulatory structure (SDRS) that would provide incentives based on compliance history and participation in voluntary programs. This structure would provide an umbrella for other innovative programs such as EMSs, Clean Texas, and Regulatory Flexibility.

The overall concept of these programs is to provide

...incentives to a person in return for benefits to the environment that exceed benefits that would result from compliance with applicable legal requirements....

HB2912 specifically directs the Pollution Prevention Advisory Committee (PPAC)—which advises the Commission—to help the agency create and implement a strategically directed regulatory structure (a program that uses incentives for regulated entities that go beyond compliance while benefitting the environment.)

SBEA has been closely working with the Strategic Environmental Analysis Division at the agency to develop the SDRS and be able to provide coordinated incentives to the regulatory community for enhanced environmental performance.

SBEA will be reporting to the legislature on the success of Innovative Programs, including Clean Texas and EMSs. Using data from site assistance visits, pollution prevention training, and EMS programs, these measures will provide:

- the amount of air emissions and waste reduced and minimized (in tons), and
- the amount of financial savings achieved by the regulated community
Appendix 1 - SBEA Organizational Chart
Appendix 2 - List of Legislative Mandates
Appendix 3 - List of Advisory Committees
Appendix 4 - External Recognition of SBEA
Appendix 5 - Notable SBEA Publications
APPENDIX 1 SBEA ORGANIZATIONAL CHART

Israel P. Anderson
Division Director, Small Business Ombudsman/Advocate
Executive Assistant

Event Coordination and Education
Harold Baughman, Manager

Outreach and Education
Agricultural Waste Pesticide Collection
Texas County Cleanups
Household Hazardous Waste Program
Lake and River Cleanups
Nonpoint Source Pollution Awareness Campaign
Nuts You Can Use/Message of the Month
Air Public Education Initiatives
Teaching Environmental Sciences Program
K-8th Grade Teacher Training
Environmental Education Outreach
Yardwise/Master Compostor Recycling Assistance and Education

Seminars, Workshops, Conferences
Compliance-Oriented Workshops & Seminars
Texas Recycles Day
Clean Texas Conference
Environmental Trade Fair & Conference
Texas Environmental Excellence Awards

Pollution Prevention Assistance Specialists
Region 4 (Dallas/Fort Worth) - 1
Region 10 (Beaumont) - 1
Region 12 (Houston) - 1

Pollution Prevention, Recycling/Composting
Clean Texas Program, Conferences & Forums
Clean Texas Program, Compost Program
Agricultural Composting
Workplace Recycling
Recycling and Compost Market Development
Recycled-Content Newsprint Survey
Compost Solutions
Pollution Prevention Week

Industrial Pollution Prevention
Site Assistance Visits
Waste Reduction Policy Act (WRPA) Assistance
Resource Exchange Network for Eliminating Waste (RENEW)
Permanent Pollution Prevention Programs (P4)
Innovative Program/Technologies
Assistance on Environmental Management Systems
Proposition 2 Tax Exemptions
Military & Federal Facilities Pollution Prevention
Wastewater Pollution Prevention
Border Pollution Prevention

Compliance Assistance Site Visits
Technical & Compliance Assistance Hotline
Compliance Commitment Partnership
Assistance on Environmental Management Systems
Bi-monthly Rules Updates

Small Business Assistance
Texas EnviroMentor Program
Small Business Compliance Advisory Panel
Regional Small Business Advisory Committees
Advisory Committees (Texas EnviroMentor, Rules Review, Plain Language)

Local Government Assistance
Water Utilities Assistance
Texas Small Towns Environment Program (STEP)
Local Government Advisory Committee

Compliance Assistance Specialists
Region 1 (Amarillo) - 1
Region 2 (Lubbock) - 1
Region 3 (Abilene) - 1
Region 4 (Dallas/Fort Worth) - 2
Region 5 (Tyler) - 1
Region 6 (El Paso) - 1
Region 7 (Midland) - 1
Region 8 (San Angelo) - 1
Region 9 (Waco) - 2
Region 10 (Beaumont) - 1
Region 11 (Austin) - 1
Region 12 (Houston) - 2
Region 13 (San Antonio) - 1
Region 14 (Corpus Christi) - 1
Region 15 (Harlingen) - 1
Region 16 (Laredo) - 1

Texas EnviroMentor Program
Small Business Compliance Advisory Panel
Regional Small Business Advisory Committees
Advisory Committees (Texas EnviroMentor, Rules Review, Plain Language)

Local Government Assistance
Water Utilities Assistance
Texas Small Towns Environment Program (STEP)
Local Government Advisory Committee
APPENDIX 2 LIST OF LEGISLATIVE MANDATES

SBEA programs are mandated by the following legislation:

- House Bill 2997 (77th Legislature, Sunset Bill)
- House Bill 2912 (77th Legislature, Environmental Management Systems)
- Waste Reduction Policy Act of 1991 (SBs 1099)
- Omnibus Recycling Act
- Texas Solid Waste Disposal Act
- Texas Health & Safety Code, Chapter 361
- Clean Air Acts (federal and state)
- General Appropriations Act
- SB 356 (77th Legislature, Performance Measures)
- SB 749 (77th Legislature, Actions in Mexico)

APPENDIX 3 LIST OF ADVISORY COMMITTEES

The following groups advise SBEA in administering its diverse programs.

- Pollution Prevention Advisory Committee (formerly the Waste Reduction Advisory Committee)
- Small Business Compliance Advisory Panel (CAP)
- Environmental Management System Stakeholder Group
- Local Government Advisory Committee (LGAC)
- Plain Language Review Committee
- Small Business Rules Review Committee
- Small Business Advisory Committees (SBACs)
- Texas Environmental Excellence Awards Blue Ribbon Committee
- Texas EnviroMentor Advisory Group
APPENDIX 4 EXTERNAL RECOGNITION OF SBEA

Clean Texas Program

- received the *National Environmental Excellence Award for a Partnership and Conservation Program* in June 2001 from the National Association of Environmental Professionals.

- received an Award of Excellence for its promotional materials and an Award of Merit for its members-only newsletter from the Society for Technical Communication in 2002.

- attained a Clean and Green certification for its 2002 annual conference from the Cleaner and GreenerSM Program of the Leonardo Academy.

Composting Award

Received the 2002 National American Association of State Highway Transportation Officers (AASHTO) *President’s Award for Environmental Excellence* for its State Quality Initiative, a statewide compost program implemented with the Texas Department of Transportation (TxDOT).

Anniversaries

These SBEA programs celebrated their 10th anniversaries:

- Clean Texas Program (now revamped)
- Texas Environmental Excellence Awards
- Texas Recycles Day
APPENDIX 5 NOTABLE SBEA PUBLICATIONS

Publishing materials is an important service to our diverse customers. SBEA created or revised these publications.

**Environmental Education**

- Teachers' Guide to Environmental Education Resources (GI-079)
- Lesson Plans and Resources for Teaching Environmental Sciences (GI-268)
- *Air, Water, Land: Find out what you can!* (coloring book; GI-270)
- Let’s Tackle the Grease in This Kitchen (GI-290)

**Pollution Prevention**

- What Do I Do With It Now? A Quick Guide to Recycling Resources (GI-288)
- Pollution Prevention Ideas for You (poster; GI-254)
- Clean Texas Progress Report (GI-283)
- Clean Texas Champions (GI-289)

**Regulatory Guides**

- Environmental Guide for Texas Foundries (RG-387)
- Environmental Guide for Texas Printers (RG-392)
- Environmental Guide for Texas Surface Coaters (RG-404)
- MACT Standards for Chromium Electroplaters and Anodizers (RG-402)
- Answers to Common Questions about Waste from Grease Traps, Grit Traps, and Septic Tanks (RG-389)
Small Business/Local Government Assistance

- Tool Kit of Resources on Managing Municipal Solid Waste (GI-294)
- Volunteer to Lend a Helping Hand as an EnviroMentor (GI-292)
- Get a Helping Hand from an EnviroMentor (GI-293)
- TCEQ’s Site Visit Program: Free Help Meeting Environmental Rules (GI-291)
- Let’s Tackle the Grease in This Kitchen (GI-290)