VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Air Modeling and Data Analysis
Location/Division	4th Floor / Building F / Air Modeling and Data Analysis Section / Air Quality Division / Chief Engineer's Office
Contact Name	David Brymer
Actual Expenditures, FY 2008	$10,696,742
Number of FTEs as of August 31, 2008	31

B. What is the objective of this program or function? Describe the major activities performed under this program.

The Air Modeling and Data Analysis function provides technical and scientific support for the assessment of air quality in relation to standards and rules established by the Environmental Protection Agency (EPA) under the federal Clean Air Act (FCAA). Major activities in support of the objective include:

- photochemical modeling for ozone to predict outcomes for air quality planning;
- development of meteorological fields for use in photochemical modeling;
- development of air pollutant and source category emissions inventories (point, mobile, non-road mobile, area and biogenic), for use in photochemical modeling;
- analyses of trends in air quality to evaluate ambient pollutant concentrations and meteorological data to help predict progress toward meeting federal air quality standards and to assess the causes of high pollutant and ozone concentrations; and
- performing advanced scientific and data analyses to address new federal mandates and emerging air quality issues to include regional haze, fine particulate matter, lead, etc.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

Program effectiveness is evidenced by EPA approval of revisions to the State Implementation Plan (SIP) and photochemical modeling protocols used to develop and revise the SIP. In recent years the EPA has approved SIP revisions for the Dallas–Fort Worth, Houston-Galveston-Brazoria, and Beaumont–Port Arthur (BPA) areas. Each

revision included extensive technical support (modeling, data analysis, and corroborative technical evaluations).

The effectiveness of the modeling, analyses, and air quality research has contributed to the overall improvement in ambient air quality in Texas, particularly in the positive trends in ozone in the urban areas of the state.

Others:
LBB Output Measure 01-01-01.03, Number of Mobile Source Air Quality Assessments: For FY 08, this performance met 101.44 percent of projections, or 1,268 quality assessments.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

1995

- The Texas Legislature includes in the Texas Natural Resource Conservation Commission Appropriations Bill rider funds to support an air quality program designed to keep areas of the state in attainment of the ozone standard. The program was known as the Near-Nonattainment Area Program and initially included the areas of Austin, San Antonio, Corpus Christi and Tyler-Longview.

2000

- A major air quality study along the eastern half of the state designed to research ground-level ozone and fine particle air pollution in the Houston region and the eastern half of Texas. The data were used to develop better assessment tolls and more efficient and cost-effective strategies to manage air quality. The state joined forces with more than 40 public, private, and academic institutions. An additional field study was conducted during 2005 and 2006 with many of the same partners.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

Program activities have the most impact on citizens who live in areas of the state that do not meet the federal ambient air quality standards.

Program functions can affect citizens and businesses in many areas of the state. Photochemical modeling and data analysis results support the development of SIP revisions and air quality rules that affect individuals, business, and industry. While current ozone SIP processes focus primarily with three nonattainment areas—Dallas–Fort Worth, Houston-Galveston-Brazoria, and Beaumont–Port Arthur—the modeling and analyses include a broader area of the state.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

The EPA establishes schedules for SIP submission as part of its rule-implementation process following adoption of revisions to National Ambient Air Quality Standards. The technical support is developed in advance of the deadline for SIP submission and generally begins three years before a SIP revision is due to be submitted to the EPA.

Review of air quality data is ongoing. The photochemical modeling inputs are determined by the TCEQ technical staff in consultation with EPA personnel and input from stakeholder groups, as required under EPA modeling guidance documents.

Refer to the flowchart *Air Modeling and Data Analysis Section* following Question O.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0151	Clean Air Account	$6,122,665
0555	Federal Funds	$416,189
5071	Emission Reduction Plan	$3,576,007
5094	Operating Permit Fees	$581,881

Strategy—A.1.1—Air Quality Assessment and Planning

Rider 8	Appropriation: Air Quality Planning
Rider 14	Appropriation: Refinement and Enhancement of Modeling to Demonstrate Attainment with Clean Air Act
Rider 19	Appropriation Limited to Revenue Collection: Automobile Emission Inspection Fee
Rider 28	Texas Emissions Reduction Program Grants and Administration

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

The Rider 8 Program, administered through the TCEQ, funds local governmental organizations. Recipients include the Alamo Area Council of Governments, the Capital Area Council of Governments, the Northeast Texas Council of Governments, and the cities of Corpus Christi and Victoria.

Similarities. These organizations fund projects such as emissions-inventory development, monitoring, or photochemical modeling that feeds into the photochemical modeling and data analysis used for SIP development and revisions for nonattainment areas.

Differences. The work done by these authorities is not required for SIP development, but complements efforts to achieve a more comprehensive data set and analyses.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

The activities of regional and local government agencies under Rider 8 are performed through grant contracts. Work plans carried out through those contracts are negotiated with the Air Quality Division technical staff and management.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

Modeling, data, and scientific-support projects are carried out through contracts with councils of governments including the ones mentioned above but also with the North Central Texas Council of Governments and Houston-Galveston Area Council.

The Air Modeling and Data Analysis Program works with the EPA as required to reach agreement on technical components included in the SIP. This is known as the *modeling protocol*. The function must also address issues and comments raised by the EPA during the SIP comment period, prior to adoption by the TCEQ and submission of the revised SIP by the governor to the EPA.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

- Expenditures: $6,177,437

- Number of contracts: 14

Some of the general purposes of the contracts overall include:

- deployment of specialized monitoring platforms;

- analyses of the data collected during the field studies;

- supplemental photochemical modeling support for the Dallas–Fort Worth SIP revision;

- investigative studies to improve the understanding of the complex nature of ozone formation along the Texas Gulf coast;

- development of emissions inventories and growth projections used in the overall photochemical modeling process;

- development of enhancements to the emission inventory processors, meteorological inputs and chemical mechanisms;

- collection of satellite data used to develop improved biogenic emission inventories; and

- collaborations with local governments on air quality programs designed to keep areas in attainment of the ozone air quality standard.

Methods used to ensure accountability for funding and performance include a defined and consistent process for developing, implementing, and tracking projects, which includes project prioritization in alignment with required work and with agency priorities, development of a detailed scope of work to describe the work to be performed as well as deliverables and due dates, and review of all invoices to be consistent with contract dates, deliverables, work performed, and allowable expenses.

Current contracting problems include a need for more timely invoicing by vendors conducting work and the changing of the contracting comptroller object code by the comptroller.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

While air quality research has not been a specific mandate, such research has been a key component in the development of state implementation plans and regulations and control strategies during the past decade. For example, air quality research results demonstrated the important role of a class of volatile organic compounds in ozone formation. Consequently, the agency adopted rules to reduce these compounds—a more effective strategy in addressing industrial pollution. One of the TCEQ's philosophies in carrying out the missions is "to base decisions on … good science." Air quality research supports the

drive for good and sound science. The state devoted significant resources to two field studies: the Texas Air Quality Study 2000, conducted June through September 2000, and Texas Air Quality Study II, during the summers of 2005 and 2006.

Both these studies have had major impacts in improving the modeling of ozone formation and on how pollution reduction strategies have been developed for the state, particularly in support of air quality improvement efforts in the Houston-Galveston-Brazoria region.

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

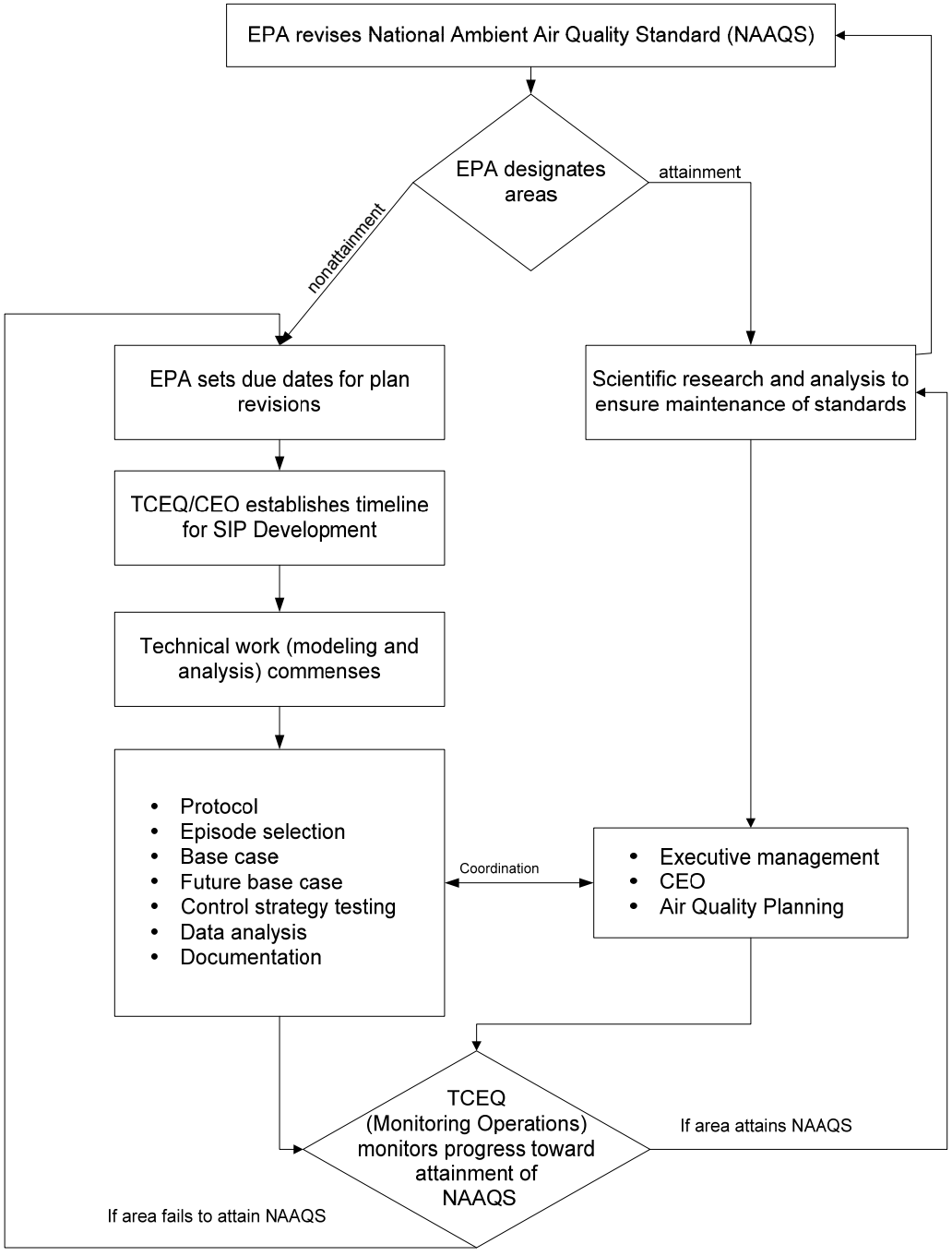
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

Air Modeling and Data Analysis Section



VII. GUIDE TO AGENCY PROGRAMS – CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Emissions Assessment
Location/Division	4th Floor / Building F / Emissions Assessment Section / Air Quality Division / Chief Engineer's Office
Contact Name	David Brymer
Actual Expenditures, FY 2008	$3,047,253
Number of FTEs as of August 31, 2008	43

B. What is the objective of this program or function? Describe the major activities performed under this program.

Emissions Assessment is responsible for the administration of four non-regulatory programs: the Point Source Emissions Inventory (EI); the Area Source EI; Air Emissions and Inspection Fees; and Toxics Release Inventory (TRI).

Point Source EI Program

This program develops an inventory of any criteria air pollutant subject to the National Ambient Air Quality Standards (NAAQS) and any other regulated air pollutants emitted by stationary point sources such as refineries, chemical manufacturing plants, and electric generation plants located in Texas.

The statewide point source EI is submitted to the Environmental Protection Agency (EPA) for inclusion in the annual National Emissions Inventory (NEI). The EI Program supplies data for a variety of air quality planning tasks, including establishing baseline emission levels, calculating emission-reduction targets, development of control strategies for achieving required emission reductions, and tracking actual emission reductions against the established emissions growth and control budgets. The EI Program is also a critical input into air quality simulation models used for revisions to the State Implementation Plan (SIP).

Area Source EI Program

This program develops a statewide EI for those sources not included in the point source and mobile source EI that are below point source reporting thresholds and too numerous to inventory individually.

A periodic emissions inventory (PEI) of statewide area source emissions is developed every three years by compiling EI data for each area source category. The statewide area source PEI is extracted from the area source EI database and submitted to the EPA so it can be included in the periodic NEI.

The EI Program provides data for a variety of air quality planning tasks, including calculating emission reduction targets and control strategy development for achieving required emission reductions. This program is also a critical input into air quality simulation models used for revisions to the SIP.

Air Emissions and Inspection Fees Program
This program assesses emissions fees to cover the direct and indirect costs for administering the federal operating permit program and to assess inspection fees to cover the costs for other TCEQ air programs. The revenue from these fees is deposited either to the Clean Air Account #151 or Operating Permits Fee #5094.

TRI Program
The TRI Program collects toxic chemical release forms, reviews toxic release data, and assesses a fee based on the number of toxic chemical release forms submitted by the owner or operator of a regulated entity subject to the TRI reporting requirements. Federal law requires certain industries that manufacture, process, or use toxic chemicals above certain thresholds to report annually to both the EPA and state the toxic releases, discharges, waste generation, and disposal occurring at their sites.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

Point Source EI Program
LBB Key Output Measure (01-01-01.01). Number of Point Source Air Quality Assessments

According to this FY 08 measure, the Point Source EI Program assessed 1,965 point source emissions inventories. The program contributed to a three percent reduction in emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) from point, area, on-road mobile, and non-road mobile sources in the ozone nonattainment areas.

In FY 08, the finalized 2006 statewide point source EI was submitted to the EPA for inclusion in the annual NEI in compliance with the federal Consolidated Emissions Reporting Requirements.

Area Source EI Program
LBB Key Output Measure (01-01-01-02). Number of Area Source Air Quality Assessments.

The program assessed 2,577 area source emissions inventories. The program contributed to a three percent reduction in emissions of VOCs and NO_x from point, area, on-road mobile, and non-road mobile sources in the ozone nonattainment areas.

In FY 08, the area source EI was under development for inclusion in the 2008 Point Source Emissions Inventory (PSEI) in compliance with the federal Consolidated Emissions Reporting Requirements.

Air Emissions and Inspection Fees Program
The owners or operators of 3,521 regulated entities were identified and notified of having the potential obligation to pay either the air emissions fee and/or inspection fee. Based on the fees data for FY 08, 1,385 regulated entities were assessed an emissions fee; 1,806 regulated entities were assessed an inspection fee; and 330 regulated entities demonstrated that they were not subject to the fees.

During the reconciliation of the self-reported fee basis information and the regulated entity's point source emissions inventory, Air Emissions and Inspection Fees staff identified 128 regulated entities that incorrectly self-reported their emissions for the basis of the emissions fee at a rate lower than their actual emissions on their point source emissions inventory. As a result, fees were assessed on an additional 20,191 tons of air emissions.

TRI Program
LBB Outcome Measure 01-01-07. Annual Percent Decreases of Toxic Releases in Texas

The program reported a three percent FY 08 reduction in releases of toxics in the state.

In FY 08, 1,490 regulated entities in Texas met the TRI reporting requirements and submitted a total of 7,936 toxic chemical release forms.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

Air Emissions and Inspection Fees Program
Fee rules were revised in October 2002 and, beginning in FY 03, assessment of the emissions and inspection fees changed from self-reporting fees to a billing system, in accordance with a previous Sunset recommendation. During the revision of the fee rules, program personnel determined that the emissions fee rate per ton needed adjustment in anticipation that insufficient funds would be collected to cover the cost for administering the federal operating permit program. Additionally, the inspection-fee rates had not been adjusted for 10 years. Therefore, by rule, the emissions fee rate per ton is adjusted annually by the rate of change of the Consumer Price Index (CPI) to coincide with the method identified in the federal rules. The inspection-fee rates are also annually adjusted by rule proportionally to the rate of change of the CPI.

TRI Program

- The TRI Program was created in 1986 by the federal Emergency Planning and Community Right-to-Know Act as Title III of the Superfund Amendment and Reauthorization Act. Section 313 of Title III requires certain industries that manufacture, process, or use toxic chemicals above certain thresholds to annually report the toxic releases, discharges, waste generation, and disposal that occurred at their site on toxic-chemical-release forms to the EPA and to supply a copy of the forms to the state.

1988

- First TRI issued.

1991

- The EPA issued rules to roughly double the number of chemicals that are required to be reported in the TRI to approximately 650 following passage of the federal Pollution Prevention Act in 1990.

1999

- The EPA published a final rule on October 29, 1999, reclassifying certain chemicals and chemical categories as persistent bio-accumulative toxics (PBTs) on the TRI list and lowered reporting threshold for these PBTs.

1998

- Seven new industry sectors were added to expand coverage significantly beyond the original covered industries.

2001

- On January 17, 2001, the EPA published a final rule reclassifying lead as a PBT and lowered its threshold.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

Point Source EI Program

The owner or operator of a source located in Texas or on waters that extend 25 miles from the shoreline meeting certain criteria is required to submit emissions inventories and/or related data. In FY 08, the emissions inventory data for 1,965 point sources were received, reviewed, and entered into the point source EI database to develop a statewide point source EI.

Area Source EI Program

The owner or operator of an area source located in Texas or on waters that extend 25 miles from the shoreline is subject to the special emissions inventories and is required to submit an emissions inventory when specifically requested by the TCEQ.

Air Emissions and Inspection Fees Program

The owner or operator of a regulated entity is assessed an emissions fee if the entity meets certain criteria. For FY 08, 1,921 regulated entities were subject to this assessment.

In addition, inspection fees apply to regulated entities that operate plants, facilities, or processes under 78 standard industrial classification (SIC) codes as described in the inspection fee schedule in 30 Texas Administrative Code (TAC) Section 101.24. For FY 08, 2,421 regulated entities were subject to this assessment because they met one or more SIC categories as described in the inspection-fee schedule.

TRI Program

Owners or operators of regulated entities meeting certain criteria are subject to the TRI reporting requirements. In FY 08, 1,490 owners or operators of regulated entities located in Texas met the TRI reporting requirements and reported their toxic chemical releases that occurred in calendar year 2007.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

Point Source EI Program

Refer to the flowchart *Emissions Inventory Process* following Question O.

The owner or operator of a point source must determine if the source meets the requirements for submitting a point source EI. If one must be submitted, the point source EI along with documentation supporting the reported emissions is due annually by March 31 or 90 days from agency request. Point source EI personnel are responsible for reviewing the EI data and documenting their findings in accordance with the program's review guidance and protocol. Program personnel assure the quality of all emissions data in accordance with the EPA-approved Quality Assurance Project Plan. The EI data are stored and maintained in the point source EI database. The owner or operator of a point source is afforded an opportunity to approve or dispute emissions stored in the point source EI database. The statewide point source EI is extracted from the database, formatted, and submitted to the EPA for inclusion in the NEI. The point source EI is also extracted and used in air quality simulation models that support SIP revisions.

Area Source EI Program

Refer to the flowchart *Emissions Inventory Process* following Question O.

Area source categories needing EI development or improvement are identified. Due to the large volume of area source data inventoried, contractors are regularly used to assist in developing program data, potential control factors, and the emissions factors for the identified area sources. Area Source EI Program personnel develop an EI for each identified area source category by applying the respective program data, control factors, and emissions factors. Program personnel assure the quality of all emissions data in accordance with the EPA-approved Quality Assurance Project Plan. The area source EI is loaded and maintained in its own database.

Air Emissions and Inspection Fees Program

The owner or operator of a regulated entity is responsible for determining if that entity is subject to the assessment of an emissions fee or inspection fee each fiscal year. If the owner or operator has determined that his or her site is subject to either fee, he or she must self-report the basis for any such fee.

Air Emissions and Inspection Fees personnel review the self-reported fee basis and reconcile that information with the regulated entity's permits and/or point source emissions

inventories to determine the appropriate fee type and amount. A regulated entity subject to both an emissions fee and inspection fee is only required to pay the higher of the two.

Since these are billed fees, the program staff forwards data on the fees to the TCEQ Financial Administration Division to generate and mail invoices, collect the fees, and assess late fees and penalties.

TRI Program

Owners or operators of regulated entities are responsible for determining the applicability of the TRI reporting requirements. If the owner or operator determines an entity is subject to the requirements, the toxic chemical release forms for each applicable toxic chemical released in a calendar year are submitted annually by July 1 of the following year to both the EPA and the state's TRI Program.

Upon receipt of the toxic chemical release forms, the program staff performs the following for each regulated entity:

- tracking the number of toxic chemical release forms submitted;
- reconciling the type of release and the amount of toxic chemical released in the current reporting year with the previous reporting year to identify any significant changes or potential TRI reporting issues;
- filing the toxic chemical release forms;
- determining the toxic chemical release fee owed; and
- generating the customer and invoice text files for the TRI reporting year.

Program personnel develop TRI trends, review the Texas TRI data, and provide compliance training and technical assistance specific to the industry in Texas.

The toxic chemical release fee is a billed fee invoiced by the TCEQ Financial Administration Division, which also collects the fees and assesses any late fees and penalties.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0151	Clean Air Account	$1,126,442
0555	Federal Funds	$300,115
5094	Operating Permit Fees	$1,620,696

Strategy— A.1.1—Air Quality Assessment and Planning

Rider 14—Modeling to Demonstrate Attainment with Clean Air Act
Rider 19— Appropriations Limited to Revenue Collection: Automobile Emission Inspection Fee

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

Point Source EI Program
No other program collects and assesses annual point source criteria and hazardous air pollutant emissions data as well as information characterizing process equipment, abatement devices, and emissions points in accordance with federal Consolidated Emissions Reporting Requirements.

However, the EPA's Acid Rain Program collects hourly emissions data of three specific pollutants (sulfur dioxide, nitrogen oxides, and carbon dioxide) quarterly from a subset of point sources (electric-generating facilities) subject to Title IV of the Clean Air Act.

The Federal Acid Rain Program primarily differs from the TCEQ's program as follows:

- reporting timeframe (hourly versus annual emissions reporting);
- pollutant scope (three specified pollutants versus criteria and hazardous air pollutants); and
- source applicability (electric generating facilities versus any source meeting point source reporting thresholds specified in 30 TAC Section 101.10).

Area Source EI Program
The EPA develops emissions inventories for area source categories using default program data and EPA-approved emissions factors. The TCEQ develops the area source EI using state-specific program data and submits it to the EPA to replace the EPA area source EI developed with default data. EPA area source emissions inventories typically rely on population as a program surrogate, whereas TCEQ-developed program data (e.g., amount of gasoline sold in an area, employment by industry type, and acres of cropland) are obtained via targeted surveys, research, and investigations and incorporated into the area source EI.

Local municipalities and the councils of governments may develop emissions inventories specific to their geographical area that are then submitted to the TCEQ. The local municipalities and councils of governments include, but are not limited to, the Corpus Christi Metropolitan Planning Organization, Victoria Metropolitan Planning Organization, El Paso Metropolitan Planning Organization, Capitol Area Planning Council, Alamo Area Council of Governments, East Texas Council of Governments, Houston-Galveston Area Council, and North Central Texas Council of Governments. These locally developed area source inventories usually refine specific source category estimates for their geographical areas to be included in the agency's area source inventory. Therefore, the locally

developed inventories are not as broad or comprehensive in scope as the agency-developed statewide area source EI.

Air Emissions and Inspection Fees Program
None. The State of Texas has been delegated the federal operating permitting program and collects emissions fees that are sufficient to cover the direct and indirect costs for administering the program in Texas.

TRI Program
The EPA administers the TRI Program at the national level. Both the EPA and the TCEQ TRI programs give technical assistance to regulated industries and the general public. However, TCEQ personnel may be more familiar with industries located in Texas and can supply greater state-relevant technical assistance. The TCEQ TRI Program develops trends and performs in-depth analyses specific to Texas, while the EPA focuses on toxic-chemical releases at the national level. The state's TRI Program assesses a fee on releases of toxic chemicals; the EPA does not assess any TRI fees.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

Point Source EI Program
The federal Acid Rain Program collects hourly emissions data for specific pollutants from a subset of point sources. The limited scope of pollutant data collected as well as the hourly basis on which emissions are collected circumscribes duplication between the two programs. The TCEQ uses the Acid Rain Program data as part of quality-assurance measures for emissions of sulfur dioxide and nitrogen oxides from electric-generating facilities, although Acid Rain Program emissions can vary slightly from emissions reported to the point source EI due to differing calculation methods.

Area Source EI Program
Local area source emissions inventories developed by local municipalities and councils of governments are incorporated through a coordinated process into the statewide area source point source PEI. The statewide area source PEI is submitted to replace the EPA developed national area source EI data.

For quality assurance, program personnel review the EPA-developed area source EI for Texas and submit state-specific data to replace the EPA default data. In certain cases, default EPA data not typically representative of the state's industrial, agricultural, or population profiles (for example: snowmobiles) are removed from the EPA-developed area source EI. The EPA typically accepts these changes made by the TCEQ.

TRI Program
The EPA administers the TRI Program; and is therefore responsible for its compliance and enforcement duties. Also, the EPA is responsible for maintaining and storing the TRI data in

a national database and for making the TRI data readily available to the public. The EPA also ensures that state TRI programs are aware of the latest TRI guidance and reporting requirements by coordinating annual meetings and monthly teleconferences.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

Point Source EI Program and Area Source EI Program
Both of these EI programs work with the EPA's Emissions Inventory Program, which develops the guidance and instruction for the state's EI Program to follow when preparing and submitting their annual statewide point source emissions inventory.

Area Source EI Program
The Area Source EI Program works with the EPA's Emissions Inventory Program. The EPA Emissions Inventory Program develops the guidance and instruction for the state's EI Program to follow when preparing and submitting its periodic statewide area source emissions inventory.

Air Emissions and Inspection Fees Program
The Air Emissions and Inspection Fees Program works with the EPA's Operating Permits Program. The EPA Operating Permits Program ensures that the states' Title V programs are being administered in accordance with the federal requirements. The state's fee program has to demonstrate to the EPA that sufficient emissions fees are collected to cover the direct and indirect costs associated with administering the Title V Program.

TRI Program
The state's TRI Program assists the EPA by attending numerous public outreach events to provide technical assistance to those subject to the TRI reporting requirements.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

- Expenditures: $720,034

- Number of contracts: 7

Contract activities included:

- Development of the Web-based emissions inventory reporting system within the State of Texas Air Reporting System.

- Remote-sensing-technology options for estimating emissions.

- Evaluation of the upstream oil- and gas-storage tank flash-emissions model and data analysis of the TCEQ 2007 Differential Absorption Lidar (DIAL) Study.

- Membership in the Data Consortium was used to obtain economic data used with area source through Global Insight and the Economy.com factor data set.

- Assisting area source EI development for the following source categories: stage I and II gasoline dispensing; minor stationary point sources; architectural coatings; and auto refinishing.

- Data exchange between the state and federal TRI programs.

- Temporary staffing for emissions inventory review and data entry.

The methods used to ensure accountability for all emissions-assessment programs' contracts for funding and performance include having a defined and consistent process for developing, implementing, and tracking projects, including project prioritization in alignment with required work and alignment with agency priorities, development of a detailed scope of the work to be performed and define deliverables and due dates, and review of all invoices for consistency with contract dates, deliverables, work performed, and allowable expenses.

Current contracting problems for all of the Emissions Assessment Programs include a need for more timely invoicing by vendors conducting work and the comptroller's change to the contracting object code.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

Point Source EI Program

In FY 08, 2,049 industrial point source emissions inventories were submitted. 1,804 EI questionnaires were on paper and 245 were electronic. EI data for approximately 65,000 emission sources were received, resulting in approximately 500,000 emissions records to be reviewed and updated in the point source EI database.

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

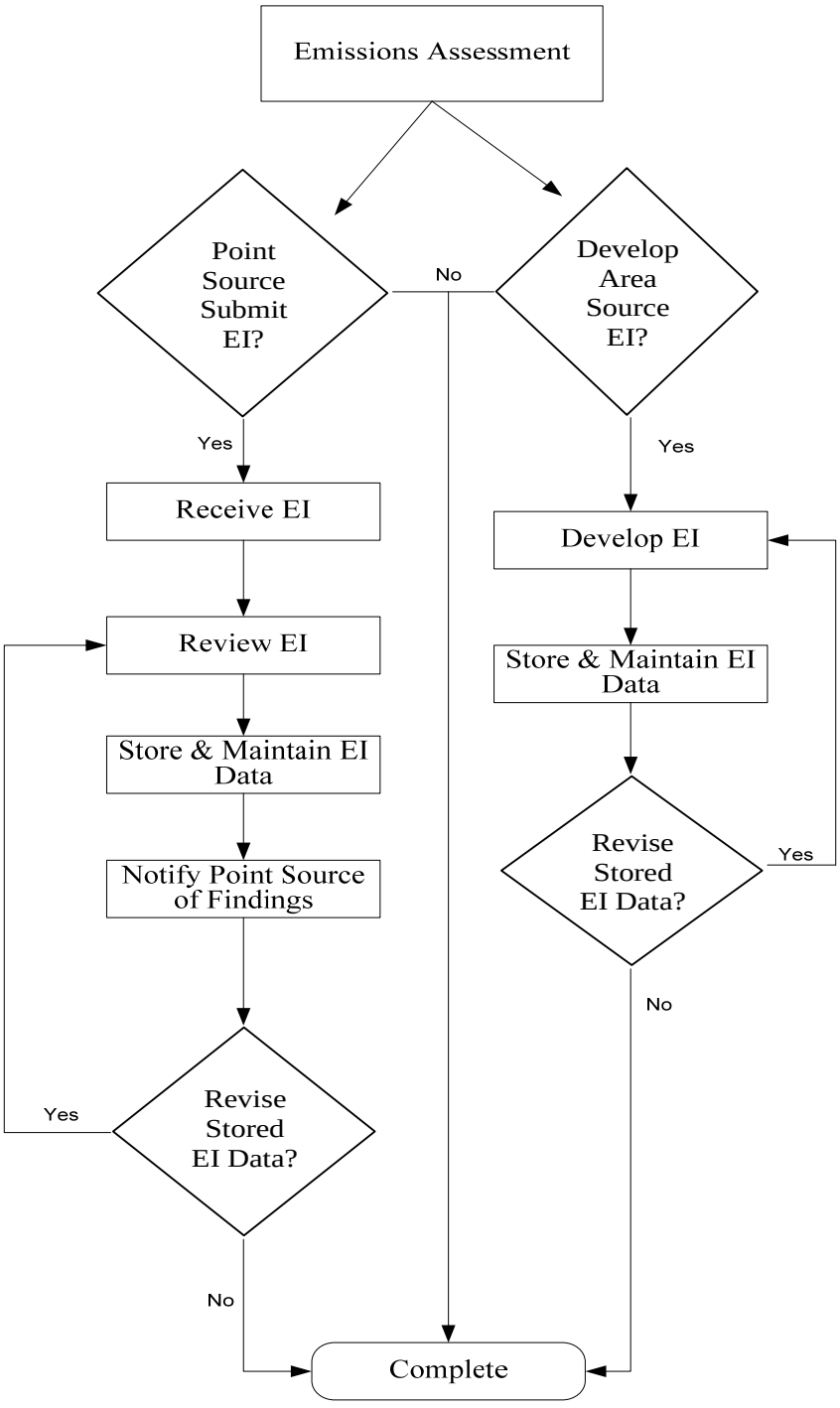
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

Emissions Inventory Process



VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Implementation Grants
Location/Division	4th Floor / Building F / Implementation Grants Section / Air Quality Division / Chief Engineer's Office
Contact Name	David Brymer
Actual Expenditures, FY 2008	$49,049,908
Number of FTEs as of August 31, 2008	34

B. What is the objective of this program or function? Describe the major activities performed under this program.

The Implementation Grants Section of the Texas Commission on Environmental Quality (TCEQ) administers incentive programs under the Texas Emissions Reduction Plan (TERP).

A primary purpose of the TERP is to reduce emissions of nitrogen oxides (NO_x) through voluntary financial incentive programs. The TERP incentive programs are a tool to help reduce the amount of NO_x emitted from on-road vehicles, non-road equipment, locomotives, marine vessels, and qualifying stationary engines operated in designated areas. The emissions reductions achieved under TERP help the state improve air quality, particularly in those areas that exceed, or are close to exceeding, the National Ambient Air Quality Standards.

The financial incentive programs administered by the Implementation Grants Section as of August 31, 2008, are listed and explained briefly below.

- **Emissions Reduction Incentive Grants Program.** The program provides grants to cover some or all of the costs for projects in one or more of the state's 41 counties (see table *Counties in Texas eligible for the TERP Program* following Question O) designated as being in nonattainment or near-nonattainment for ground-level ozone. Eligible projects include:

  - the purchase of reduced-emission vehicles and equipment;
  - replacement of older vehicles or equipment with newer, cleaner models;
  - repower (replacement) of older engines with newer, cleaner models;
  - installation of retrofit technologies that will result in a reduction in NO_x emissions;

- on-vehicle infrastructure to reduce idling;
- on-site infrastructure for alternative fuels, electrification, and idle reduction;
- purchase and use of qualifying fuels that reduce NO_x emissions; and
- relocation of rail lines at intersections.

For a project to be eligible, it must reduce NO_x emissions by at least 25 percent over a baseline set by the TCEQ.

- **Rebate Grants Program.** Under Health and Safety Code Section 386.17, the TCEQ implements a rebate grants program for faster, simpler application and approval for a limited number of grants. This program is a subset of the larger Emissions Reduction Incentive Grants Program and has the same eligibility requirements. However, the rebate grants are based on a pre-determined grant amount and are approved through an expedited application review and contracting process. To date, the TCEQ has made this program available for the replacement or repower of diesel-powered on-road vehicles and certain types of non-road equipment.

- **Third-Party Grants Program.** The TCEQ may issue grants to third parties to pass funds through to subgrants, consistent with the overall TERP requirements. To date, the TCEQ has limited the third-party grants to governmental authorities. Consideration of issuing a third-party grant is based on whether the grant would add value to the program and help to better meet TERP goals.

- **Small Business Grants Program.** This program targets small businesses and other entities that own and operate no more than two vehicles or pieces of equipment. The TCEQ is directed to set aside funds to enable the eligible entities greater opportunities to participate in the incentive programs. Because of the similar goals of this program and the rebate grants program, the TCEQ has incorporated the set-asides for this program in the rebate grants program.

- **New Technology Research and Development (NTRD) Program**. The Implementation Grants Section also administers funding for the New Technology Research and Development (NTRD) Program established under Health and Safety Code Chapter 387. The NTRD Program funds research and development for new technologies and engines to reduce emissions of NO_x. There are two contracts administered under this program. The objective of the NTRD Program is to promote the development and commercialization of technologies that will support projects that can be funded under the TERP incentive programs. In 2005, the legislature transferred responsibility for the implementation and administration of the NTRD Program from the TCEQ to the Texas Environmental Research Consortium (TERC), a nonprofit organization located near Houston, Texas. The TCEQ's role has been to contract with TERC to fund the program.

- **University of Houston Diesel Emissions Testing Center.** In 2007, under NTRD Program provisions, the legislature directed the TCEQ to assist the University of Houston with funding to establish and operate a diesel-emissions testing center. The TCEQ's role is to contract with the University and fund and oversee eligible expenses.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

The key performance measures for the incentive grants and the results reported in FY 08 are listed below.

LBB Outcome Measure 01-01-02: Nitrogen Oxides (NO_x) Emissions Reduced Through the Texas Emissions Reduction Plan (TERP).

This measure reports the tons per day of NO_x emissions reduced by projects funded to date, as reported by the grant recipients on semiannual usage reports.

Projected	Actual	Percent of Projection
70 tons per day	18.50 tons per day	26.42

The actual reported performance was less than projected. Approximately 55 percent of the projects funded through FY 08 had not yet phased into the reporting stage due to the time it took some of the larger and more complex projects to complete the purchases and begin using the grant-funded vehicles and equipment. Of the projects reporting their vehicle or equipment usage through FY 08, the projects were achieving over 90 percent of the usage and emissions reduction targets.

LBB Output Measure 01-01-05: Tons of Nitrogen Oxides (NO_x) Reduced Through the Texas Emissions Reduction Plan.

While Outcome Measure 02 reports the actual tons per day of NO_x reduced based on reports by the grant recipients, Output Measure 05 reports the tons of NO_x projected to be reduced by the projects funded during the reporting period.

Projected	Actual	Percent of Projection
28,611 tons	18,218.43 tons	63.68

The original projections were based on an average cost per ton for the projects of $5,000. Subsequent to the projections for the FY 08 - FY 09 biennium, the commission increased the maximum cost per ton limits from $5,000 to $10,000 for projects other than those involving marine vessels and locomotives. This action was taken partly in response to the legislature increasing the statutory cost per ton limits. This change to the cost per ton limits resulted in a higher overall average cost per ton for projects funded in FY 08 and fewer tons projected to be achieved by those funded projects.

LBB Efficiency Measure 01-01-01.04: Average Cost Per Ton of NO_x Reduced Through the Texas Emissions Reduction Plan.

This measure reports the average cost for each ton of NO_x projected to be reduced by the projects funded during FY 08.

Projected	Actual	Percent of Projection
$5,000	$7,816	156.32

As noted above, the commissioners increased the maximum cost per ton limits for the TERP projects. This change resulted in an increase to the average cost per ton for projects funded in FY 08.

In addition to the key performance measure information for FY 08, the projects awarded funding through FY 08 totaled approximately $713 million, resulting in an expected reduction of 151,000 tons of NO_x.

The key performance measures for the NTRD Program and the results reported in FY 08 are listed below.

LBB Output Measure 01-01-01.06: Number of New Technology Grant Proposals Reviewed.

This measure reports the number of NTRD grant proposals reviewed by TERC that identify and evaluate new technologies to improve air quality and to facilitate the deployment of those technologies.

Projected	Actual	Percent of Projection
62	74	119.35

The TERC issued four rounds of grant proposals during FY 08, including a comprehensive request soliciting eligible technologies. This request for applications significantly increased the number of applications reviewed in FY 08.

LBB Efficiency Measure 01-01-01.05: Average Number of Days to Review a Grant Proposal

This measure reports the average number of days that TERC staff took to review a grant proposal.

Projected	Actual	Percent of Projection
1	1.5	150.00

Staff changes at TERC in the fourth quarter of FY 08 at the same time that one of the grant rounds closed resulted in longer review times for that grant round.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

The agency history section lists the key changes and updates for the incentive grants program through FY 08, except for one additional change to the NTRD Program. In 2005, HB 2481 directed the TCEQ to contract with a non-profit organization based in Houston for administration of the NTRD Program, transferring administration of the program from the TCEQ to the TERC.

In addition, the 81st Texas Legislature enacted several significant changes and additions to the program, to be implemented in FY 10.

- HB 1796 transferred responsibility for administration of the NTRD Program from the TERC back to the TCEQ.

- The bill also established the New Technology Implementation Grants (NTIG) Program. The NTIG Program will provide funding to assist the implementation of new technologies to reduce emissions from facilities and other stationary sources in Texas.

- SB 1759 established a new Texas Clean Fleet Program (CFP) to be administered by the TCEQ. The CFP will provide grants for the replacement of diesel-powered vehicles with alternative-fueled vehicles, including hybrid-electric vehicles.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

The Emissions Reduction Incentive Grants are available for owners of eligible vehicles, equipment, marine vessels, and locomotives operated in the 41 eligible counties designated as nonattainment or near-nonattainment for ground-level ozone. Applicants may be any person or entity, including private and governmental entities that own and operate the eligible vehicles and equipment in the designated counties.

The Rebate Grants are limited to replacement or repower of vehicles and non-road equipment. The TCEQ has further limited this program to no more than 10 grants per entity per grant round. The Small Business Grants Program has included set-asides of $5 million each grant round specifically for entities that qualify as a small business. This set-aside has been included under the Rebate Grants Program.

Third-party grants have been limited to governmental authorities. Through FY 08, the program has funded one or more third-party grants to the Texas Railroad Commission, the Texas General Land Office, and the North Central Texas Council of Governments. In FY 09, the Houston-Galveston Area Council was also awarded a third-party grant.

The Implementation Grants Section monitors the use of the grant-funded vehicles and equipment over the commitment period to achieve the emissions reductions, generally lasting from five to seven years. In FY 05 the program was monitoring the performance of 244 entities. By the end of FY 08, the number of entities and projects monitored was 1,336. By the end of FY 09, this number increased to approximately 2,000, with over 5,000 individual vehicles and pieces of equipment being tracked and monitored. The number of entities and projects being tracked will increase with each subsequent grant round.

The NO_x emissions reductions in each area will help reduce levels of ground-level ozone, enhancing the health and well-being of residents. As a strategy in the State Implementation Plan (SIP), the program helps to meet the SIP goals and bring areas into attainment of federal Clean Air Act requirements for ground-level ozone.

The NTRD Program is available for any entity that owns or controls an emissions reduction technology and wishes to develop and test that technology.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

The Implementation Grants Section is responsible for the complete life cycle of the implementation grants, including:

- developing program rules and guidelines for adoption by the commissioners;
- developing all application, contract, and program administration forms and documents;
- conducting outreach and education to promote the program and to advise applicants on how to participate;
- receiving, tracking and reviewing grant applications for administrative and technical eligibility;
- pre-application monitoring and on-site reviewing to confirm vehicle and equipment condition and use;
- administering grant selection and approval processes;
- preparing and processing for approval of all grant contracts (legal staff and the TCEQ's procurements and contracting staff review and approve contract shell documents);
- receiving and processing of reimbursement requests from grant recipients (approved requests are sent to the TCEQ's fiscal personnel for entry into the comptroller's payment system);

- managing contracts, amendments, changes, close-outs, and grantee performance evaluations;

- long-term monitoring and tracking usage;

- periodic on-site monitoring, administering a monitoring contract, and coordinating with TCEQ's external audit staff for more detailed audits of grant recipients;

- enforcing grant conditions, including invoicing for return of grant funds for grantees that do not meet the requirements and coordinating with Legal staff for grantees that must be referred to the Attorney General for civil action or the District Attorney for criminal (fraud) action; and

- tracking of all contract and program data and information in a TERP database.

Refer to flowchart *Incentive Grants Section – Major Steps in the Incentive Grants Program FY 2008* following Question O.

The NTRD Program includes a more limited set of activities to administer the contracts with the TERC and the University of Houston. Those functions include contract development and execution, contract monitoring, payment and fiscal processing, progress reporting, and general contract oversight.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0151	Clean Air Account	$66,449
0555	Federal Funds	$262
5071	Emission Reduction Plan	$48,983,197

Strategy—A.1.1—Air Quality Assessment and Planning

Rider 28, Texas Emissions Reduction Program Grants and Administration.

H. Identify any programs, internal or external to your agency, that provides identical or similar services or functions. Describe the similarities and differences.

Federal Congestion Mitigation and Air Quality (CMAQ) grants from the Federal Highways Administration may be used for projects similar to the types of projects funded under the TERP. The state's regional metropolitan transportation planning organizations may receive these funds to pass-through to local governments. In areas where a planning organization does not use these funds, the Texas Department of Transportation may fund local and

regional CMAQ projects. The Houston-Galveston Area Council and the North Central Texas Council of Governments have awarded local pass-through grants using CMAQ funds for projects similar to those funded under TERP. The eligibility requirements and the limits on cost per ton of NO_x reduced for the CMAQ Program may differ from the TCEQ's incentive grants.

The Environmental Protection Agency also administers federal grants under the Diesel Emissions Reduction Act for projects similar to the TCEQ's incentive grants. However, these projects are not limited to specific areas and may be used to address other pollutants, in addition to NO_x. Enhanced funding for this program was included in the federal stimulus funding package.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

The TCEQ's grant applications include a section for applicants to inform the agency if they would be receiving funding under another grant program for the same project. The TCEQ would then coordinate with the applicant to confirm the source of funds and the requirements for use of the emissions reductions. Because of the different eligibility requirements and the timing of the grants, there have not been instances where the TCEQ has had to consider projects with joint funding.

The TCEQ and the Texas Department of Agriculture (TDA) entered into a Memorandum of Agreement in FY 09 whereby the TDA committed to help promote the incentive programs to the agricultural sector. The TCEQ, in turn, agreed to ensure that projects involving non-road equipment used for agricultural purposes would receive up to a certain amount of funding, to be determined each grant round. In FY 09, the TCEQ established a funding level of $5 million to go specifically to projects involving agricultural equipment.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

The program works with federal and regional governmental entities, including:

- Local, state, and federal governmental authorities—these entities are eligible to apply for a grant;

- Texas Railroad Commission—third-party grant to award subgrants for projects involving propane vehicles and equipment;

- Texas General Land Office—third-party grant to award subgrants for projects involving natural gas vehicles and equipment;

- North Central Texas Council of Governments—third-party grant to fund a regional subgrants program; and

- Houston-Galveston Area Council—third-party grant to fund a regional subgrant program.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

Contracts, other than the incentive-grant contracts, administered by the program in FY 08 are discussed below.

- **Contracted expenditures from FY 08 (not including incentive grants):** $14,132,942.

- **Five contracts account for these expenditures:**

- two for compliance monitoring;

- two for research; and

- one for outreach.

- **Methods to ensure accountability for funding and performance:** The program has a separate fiscal unit to review reimbursement and payment requests. All payment requests are also reviewed by contract managers. The contracts have scopes of work describing performance expectations and reporting requirements to explain results to date and how the funds have been used. Payment requests are then routed to the agency's Financial Administration Division for additional review, entry into the agency's and comptroller's systems, and payment by the comptroller.

- **Contracting problems:** The program experienced no contracting problems in FY 08.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

Revise Health and Safety Code, Section 386.105(a), Calculation of Cost-Effectiveness. The current provisions require the TCEQ to use an annualized factor to account for the time value of money when performing calculations to ensure that projects do not exceed a

cost-effectiveness of $15,000 per ton of NO_x reduced. The TCEQ recommends amending this section to require that the cost-effectiveness be determined using a simple cost-per-ton calculation, dividing the total tons of NO_x projected to be reduced by the grant amount.

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

As noted above in Question D, the Implementation Grants Program will have added responsibilities beginning in FY 10. These new programs are due to be implemented by early calendar year 2010.

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

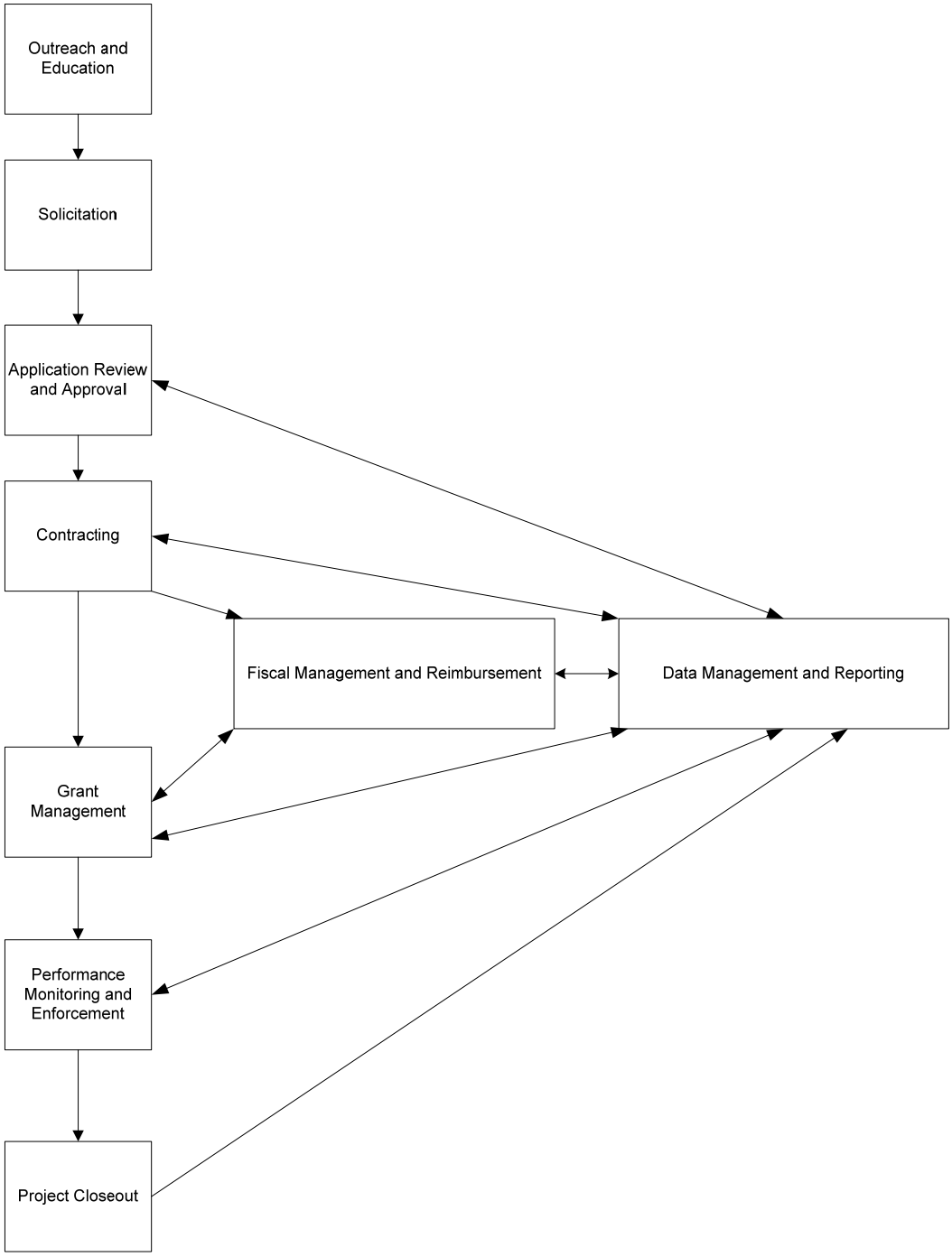
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

Incentive Grants Section
Major Steps in the Incentive Grants Process
FY 2008



Counties in Texas Eligible for the TERP Program

Bastrop	Fort Bend	Hunt	Rusk
Bexar	Galveston	Jefferson	San Patricio
Brazoria	Gregg	Johnson	Smith
Caldwell	Guadalupe	Kaufman	Tarrant
Chambers	Hardin	Liberty	Travis
Collin	Harris	Montgomery	Upshur
Comal	Harrison	Nueces	Victoria
Dallas	Hays	Orange	Waller
Denton	Henderson	Parker	Williamson
Ellis	Hood	Rockwall	Wilson
El Paso			

VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Non-Point Source and Coastal Programs (Galveston Bay Estuary Program and Coastal Bend Bays and Estuary Program)
Location/Division	4th Floor / Building F / Planning and Implementation Section / Water Quality Planning Division / Chief Engineer's Office
Contact Name	Kelly Keel
Actual Expenditures, FY 2008	$5,420,234
Number of FTEs as of August 31, 2008	16.5

B. What is the objective of this program or function? Describe the major activities performed under this program.

Nonpoint Source Program

The objective of the TCEQ Nonpoint Source (NPS) Program is to facilitate the implementation of programs and practices for managing nonpoint sources of pollution necessary to meet water quality goals. Non-point sources are pollutants entering watersheds from many sources that are difficult to pinpoint, such as storm drains. The TCEQ NPS Program supports the development and implementation of watershed-based plans to restore waters that have been impaired by nonpoint source pollution and protect unimpaired waters.

The Environmental Protection Agency (EPA) distributes funds appropriated by Congress annually to the TCEQ under Section 319(h) of the federal Clean Water Act (FCWA). The TCEQ administers federal funds for projects that assist the state in implementing the *State of Texas Nonpoint Source (NPS) Management Plan*.

The TCEQ's grant program is implemented under TWC Section 5.124 and 30 TAC Section 14.8(b) related to Partnership Grants and FCWA Section 319.

The state prepares and submits applications for grants annually and reports annually to the EPA concerning progress in meeting the schedule of milestones and reductions in nonpoint source pollutant loading and improvements in water (as available).

Galveston Bay Estuary Program

The Galveston Bay Estuary Program (GBEP) is a non-regulatory program of the TCEQ that functions as a partnership of local governments, business and industry, conservation organizations, bay users, and resource agencies. GBEP's purpose is to implement the federally approved Texas Comprehensive Conservation and Management Plan (CCMP)

developed to provide interdisciplinary, ecosystem-based management for Galveston Bay, an estuary of national significance. To carry out this purpose, GBEP:

- Coordinates the development and implementation of multi-partner habitat and water quality conservation projects that lever public and private resources, minimize duplication, and maximize resources for priority issues identified by the partnership.

- Provides grants and assistance to Houston Galveston–area communities and organizations to implement habitat, water quality, and species conservation projects, and to conduct research that informs adaptive management and ensures science-based decision making.

Coastal Bend Bays and Estuary Program

The Coastal Bend Bays and Estuaries Program (CBBEP) is based in Corpus Christi and is a local nonprofit 501(c)(3) organization established in 1999. The CBBEP project area encompasses the 12 counties of the Coastal Bend Council of Governments extending from the land cut in the Laguna Madre, through the Corpus Christi Bay system, and north to the Aransas National Wildlife Refuge. The mission of the CBBEP is to protect and restore the health and productivity of the bays and estuaries while supporting continued economic growth and public use of the bays into the future.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

Nonpoint Source Program

Since 2005, the TCEQ NPS Program has funded 59 projects under the Section 319 grant program. The projects have resulted in water quality improvements in Texas water bodies.

- Water quality has improved in Aquilla Reservoir and Lake Como to the point that they have been de-listed from the state's Section 303(d) list (of impaired water bodies) due to the implementation of NPS management measures.

- Water quality improvements have also been documented in E.V. Spence Reservoir. Recent water quality data show a 22 percent decrease in chloride concentrations, a 37 percent decrease in sulfate concentrations, and a 36 percent decrease in concentrations of total dissolved solids.

Success is also measured through NPS pollutant load reductions. In 2008, pollutant load reductions from NPS projects included:

- City of Denton—Demonstration of Best Management Practices (BMPs) were constructed at three locations in the Hickory Creek Watershed. The combined yearly estimates of pollutants that will be removed are: sediment – 61 tons, phosphorus – 27 tons, and nitrogen – 173 tons.

- Falcon Reservoir—A total of 22 Water Quality Management Plans (WQMPs) were developed within the watershed protecting 22,952 acres from sediment loss. BMPs reduced loads of sediment by 8,882 tons, phosphorus by 79,735 lbs, and nitrogen by 883,376 lbs.

- Arroyo Colorado—A total of 123 WQMPs have been developed in the watershed protecting over 6,400 acres. BMPs installed in FY 08 reduced loads of sediment by 132 tons, phosphorus by 126 lbs, and nitrogen by 172 lbs.

Galveston Bay Estuary Program
Successes realized by GBEP since its inception:

- GBEP created, protected, and restored 15,000 acres of wetlands and other vital coastal habitats.

- GBEP helped to establish the Virginia Point Peninsula Preserve, protecting 1,500 acres of valuable coastal habitat, as well as important historical and cultural resources.

- The Brays Bayou wetland in Houston consistently removes nearly 99 percent of the bacteria in the storm water inflow during dry-weather flows. This 3.5-acre multi-purpose storm water treatment wetland was funded by GBEP to demonstrate the effectiveness of creating wetlands as a BMP for treating storm water. The constructed wetland also serves as an outdoor learning center for nearby schools.

- As part of species protection and management activities initiated in the CCMP, GBEP conserved three priority bird species—the endangered brown pelican, threatened reddish egret and white-faced ibis with the shoreline protection and habitat restoration of North Deer Island in west Galveston Bay.

- GBEP developed the first comprehensive bay-wide assessment of Galveston Bay seafood in 1997 to determine if the seafood was safe for public consumption. Continuing assessments give the information needed to update state-certified seafood advisories for the Galveston Bay complex.

- The program has leveraged over $59 million in federal and partner contributions to implement projects. This equates to a 10-year annual average ratio of over $5 of contributions for every $1 of base funding.

- GBEP awarded 161 grants to local partners to support habitat conservation, water quality planning and improvement, water resource planning, and community enhancement projects.

Coastal Bend Bays and Estuary Program
Successes realized by the CBBEP since its inception:

- Restoration, to date, of over 2,600 acres of Matagorda Island marsh.

- Creation, protection, and restoration of 8,843 acres of wetlands and other vital coastal habitats since 2005.

- Initiation of efforts to acquire important wetlands and adjacent wildlife habitat in the Nueces Delta Preserve and current ownership of over 5,000 acres of land along the Nueces River.

- Leverage of over $25.6 million in federal and partner contributions to implement projects since 2005. This equates to a four-year annual average ratio of over $8.50 of contributions to every $1 of base funding.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

Nonpoint Source Program

In 1990, Congress passed the Federal Coastal Zone Act Reauthorization Amendments (FCZARA) to address the NPS pollution problem in coastal waters. Section 6217 of FCZARA requires states to develop coastal nonpoint pollution-control programs. Texas was granted conditional approval of its program in July 2003. The TCEQ and partner agencies are continuing to work toward full approval.

In FY 00, Congress doubled Section 319 federal funding nationwide from $100 million to $200 million for restoration of high-priority watersheds. In FY 01, EPA recognized the need to increasingly focus Section 319 grant dollars on implementing nonpoint source Total Maximum Daily Loads (TMDLs), or the nonpoint source components of mixed-source TMDLs. The guidelines published for FY 04 and future years continue focusing $100 million of annual Section 319 federal funds on the development and implementation of watershed-based plans to achieve NPS TMDLs.

Galveston Bay Estuary Program

In 1987, during reauthorization of the Clean Water Act, Congress established the National Estuaries Program to promote long-term planning and comprehensive regional management of nationally significant estuaries threatened by pollution, development and overuse. GBEP was established in 1989 to address Galveston Bay.

The Galveston Bay Plan was completed and approved by the governor and the EPA administrator in 1995.

In 1999, the Texas Legislature passed the Texas Estuaries Act, which designated the TCEQ as the entity responsible for implementing Texas' CCMP.

Coastal Bend Bays and Estuary Program

The Coastal Bend Bays Program began as a federal and state agency effort during the planning phase. However, participants wanted to localize and take ownership of the program as it moved from development to implementation. The change resulted in the

creation of a nonprofit organization led by a local board of directors. The nonprofit is partially funded with general revenue through the TCEQ.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

Nonpoint Source Program

Through working partnerships with state, interstate, regional, and local authorities; private-sector and citizen groups; and federal agencies, the NPS Program affects many entities. Program funding supports watershed planning and implementation, grants management, education and outreach, and monitoring. Section 319 grants are available to state agencies or political subdivisions of the State of Texas, including cities, counties, school districts, state universities, and special districts.

Galveston Bay Estuary Program

GBEP serves as a forum for coordination and peer review between federal and state agencies, local governments, commercial and recreational fishermen, industry, environmental groups, and citizens.

Coastal Bend Bays and Estuary Program

The CBBEP is a non-regulatory, voluntary partnership with industry, environmental groups, bay users, local governments, and resource managers to improve the health of the bay system within the 12-county program area. Participating organizations can include cities, counties, school districts, state universities, and private, for profit, and nonprofit organizations.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

Nonpoint Source Program

Implementation of the Texas NPS Management Program involves partnerships among other organizations, specifically the Texas State Soil and Water Conservation Board (TSSWCB), which jointly administers the Program. The EPA awards USCWA Section 319 grant funding through a six-step process: (1) the EPA issues a brief annual guidance; (2) states submit draft grant applications, including a draft work plan; (3) the EPA reviews state draft applications and comments in writing; (4) states submit final work plans and grant applications to the EPA; (5) the EPA awards grants to states; and (6) states obligate funds as expeditiously as possible. Additional funding awarded under Section 604(b) of the Clean Water Act is passed primarily to councils of governments for NPS projects. The current Texas NPS Management Program was developed in 2005 and will be updated in 2010. Texas reports annually to its stakeholders, Congress and the EPA on progress; The TCEQ and TSSWCB alternate the responsibility for preparing this annual report.

Galveston Bay Estuary Program

GBEP is administered by the TCEQ and is advised by the Galveston Bay Council (GBC), a 41-member coordinating council. GBEP is funded by appropriations from Congress through the EPA and from the Texas Legislature through the TCEQ. Implementation of its CCMP is carried out through collaborative efforts with numerous local governments, businesses, conservation organizations, and state and federal agencies, enabling GBEP to lever additional funds to implement on-the-ground habitat and water quality protection.

The GBC meets quarterly to discuss CCMP implementation by member organizations and give feedback. The GBC also makes recommendations to TCEQ regarding projects in the GBEP annual work plan. GBEP projects are developed through subcommittees composed of federal and state agencies, local governments, businesses, and not-for-profit organizations with specific expertise. Project ideas are refined and vetted by subcommittee members and submitted to the GBC for approval. Potential partners and funding are identified during project development. Outgoing grants are issued to implement projects in the work plan. Each is carried out by the grantee and guided by a project team.

Coastal Bend Bays and Estuary Program

The CBBEP is a local nonprofit organization with a board of directors comprised of representatives of local government from within the program area, industry, the Coastal Bend Bays Foundation, and the Bays Council, an advisory committee that includes the Texas Parks and Wildlife Department, Texas General Land Office, and Nueces River Authority. Implementation teams function as a subgroup to the Bays Council and make recommendations to the council regarding annual work plans.

The TCEQ liaison with the CBBEP is in the Corpus Christi regional office. A combination of local governments, private industry, and the TCEQ and EPA agencies supply additional program funding.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0555	Federal Funds	$3,271,863
0001	General Revenue	$1,939,271
0153	Water Resource Management Account	$209,100

Strategy—A.1.2—Waste Assessment and Planning

H. Identify any programs, internal or external to your agency, that provides identical or similar services or functions. Describe the similarities and differences.

Nonpoint Source Program
The Texas NPS Program is jointly administered by the TCEQ and the TSSWCB. The TCEQ is designated by law as the lead state agency for water quality protection in Texas. The TSSWCB plays an important role as the lead agency in the state for the management of agricultural and silvicultural NPS runoff. The TSSWCB administers the NPS Program for agricultural and silvicultural NPS management; the TCEQ, for all other nonpoint sources.

Galveston Bay Estuary Program and Coastal Bend Bays and Estuary Program
The two estuary programs in Texas serve different geographical areas: GBEP, the upper Texas coast (specifically the Galveston Bay area), and the CBBEP, the lower Texas coast (specifically the Coastal Bend bay and estuaries area). GBEP is a non-regulatory program of the TCEQ; the CBBEP, a local nonprofit organization. No other programs coordinate interdisciplinary resource and bay management in Texas.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

Nonpoint Source Program
A Memorandum of Understanding between the TCEQ and the TSSWCB sets out the responsibilities of the two agencies with respect to the NPS Program and facilitates cooperation between them in achieving its goals.

Galveston Bay Estuary Program
GBEP serves the Galveston Bay area, including the five counties surrounding the bay complex: Harris, Galveston, Chambers, Brazoria and Liberty. Coordination and communication are achieved through representation on the Galveston Bay Council and its subcommittees.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

Nonpoint Source Program
Implementation of the Texas NPS Program involves partnerships among many organizations, e.g., cities, counties, river authorities, and other state agencies, such as the TSSWCB. At the federal level the EPA oversees the program and guides its implementation.

Galveston Bay Estuary Program
Through the GBC, GBEP works with federal and state agencies with bay-management responsibilities; local governments and communities in Harris, Galveston, Brazoria, Chambers and Liberty counties; industry and business; environmental groups; and commercial and recreational fishermen.

Coastal Bend Bays and Estuary Program

The CBBEP is a non-regulatory, voluntary partnership effort working with industry, environmental groups, bay users, local governments, and resource managers to improve the health of the bay system. In addition, local government authorities may also sit on the board of directors, the Bays Council, and any of the five implementation teams. The project area includes the 12 counties of the region known as the Texas Coastal Bend: Aransas, Bee, Brooks, Duvall, Jim Wells, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, and San Patricio.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

FY 08 contract expenditures: $3,914,953
NPS Program: $2,315,504
GBEP: $755,567
CBBEP: $843,881
Number of contracts: 56

- The NPS Program receives grant funds from the EPA for projects that support the development and implementation of watershed-based plans to restore impaired waters and protect unimpaired waters. GBEP and CBBEP award contracts to implement their respective plans.

- Contract-monitoring activities include obtaining supporting documentation for planned contracts; holding post-award conferences; reviewing contract requirements; using checklists to review work products, progress reports, subcontracts, invoices, receipts, time sheets and travel logs; assessing risk and performing on-site monitoring of work and financial records; conducting annual contractor evaluations; following up to ensure corrective actions are taken as appropriate; and following standard operating procedures.

- The program experienced no contracting problems in FY 08.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

None

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	State Implementation Plan Development
Location/Division	4th Floor / Building F / Implementation Grants Section / Air Quality Division / Chief Engineer's Office
Contact Name	David Brymer
Actual Expenditures, FY 2008	$1,076,348
Number of FTEs as of August 31, 2008	14

B. What is the objective of this program or function? Describe the major activities performed under this program.

The State Implementation Plan (SIP) Program coordinates plan revisions required by the Federal Clean Air Act (FCAA) showing how Texas will meet the National Ambient Air Quality Standards (NAAQS) for the six criteria pollutants (carbon monoxide, ozone, sulfur dioxide, nitrogen dioxide, particulate matter, and lead) and other FCAA requirements. The SIP Program works with modeling, data analysis, emissions inventory, legal, and rule-writing staff on plan development. Program personnel are the project managers for SIP development and coordinate with other agency programs to incorporate the various subprojects that comprise a SIP revision.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

The SIP Program has met all of the Environmental Protection Agency's (EPA's) deadlines for submitting NAAQS SIP revisions. Texas submitted the first approvable 1997 ozone attainment demonstration in the nation, for the Dallas–Fort Worth area.

No key performance measures are associated with the SIP program. However, the following table outlines how the design values for the 1997 eight-hour ozone standard are trending downward. Decreasing ozone levels show that SIP revisions and associated rules are improving air quality. The design value for attainment of the 1997 eight-hour ozone standard is 85 parts per billion.

1997 Eight-Hour Ozone Design Values in Parts per Billion

Area	2000	2001	2002	2003	2004	2005	2006	2007	2008
HGB	112	110	107	102	101	103	103	96	91
BPA	87	89	90	91	92	88	85	83	81
DFW	102	101	99	100	98	95	96	95	91
TLM	102	95	88	82	83	84	85	84	78
AUS	89	88	85	84	85	82	82	80	77
SAN	86	82	86	89	91	86	87	82	78
CC	83	81	81	80	80	75	72	70	71
VIC	81	79	76	78	79	76	72	69	66
ELP	79	75	81	79	78	76	78	79	78

HGB——Houston-Galveston-Brazoria
BPA——Beaumont–Port Arthur
DFW——Dallas–Fort Worth
TLM——Tyler-Longview-Marshall
AUS——Austin–Round Rock
SAN——San Antonio
CC——Corpus Christi
VIC——Victoria
ELP——El Paso

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

None

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

The SIP Program's goal is to assess air quality in Texas as it relates to the standards and rules established by the EPA under the FCAA. The program develops three types of SIP revisions: area, regional, and statewide. Following is a breakdown of populations in Texas that are affected:

Texas population: 24,326,974
Texas population with SIP revisions specific to an = area: 17,390,631
Percentage of Texas population represented in SIP Program Areas: 71.5 percent

Following is a breakdown, by population, of each county for the 1997 ozone-standard nonattainment or near nonattainment areas in Texas that have SIP revisions in place:

Dallas–Fort Worth Nonattainment Area

Collin County	762,010
Dallas County	2,412,827
Denton County	636,557
Ellis County	148,186
Johnson County	153,630
Kaufman County	100,527
Parker County	111,776
Rockwall County	77,633
Tarrant County	1,750,091
Total	6,153,237

Houston-Galveston-Brazoria Nonattainment Area

Brazoria County	301,044
Chambers County	29,356
Fort Bend County	532,141
Galveston County	288,239
Harris County	3,984,349
Liberty County	75,333
Montgomery County	429,953
Waller County	35,995
Total	5,676,410

Beaumont–Port Arthur Nonattainment Area

Hardin County	52,143
Jefferson County	243,090
Orange County	83,022
Total	378,255

Austin–Round Rock Area

Bastrop County	73,491
Caldwell County	36,899
Hays County	149,476
Travis County	998,543
Williamson County	394,193
Total	1,652,602

San Antonio Area

Bexar County	1,622,899
Comal County	109,635
Guadalupe County	117,172
Wilson County	40,398
Total	1,890,104

Northeast Texas Area

Gregg County	117,528
Harrison County	63,594
Smith County	201,277
Upshur County	38,331
Total	420,730

Corpus Christi Area

Nueces County	322,077
San Patricio County	68,399
Total	390,476

El Paso Area

El Paso County	742,062

Victoria Area

Victoria County	86,755

(Population information is from the U.S. Census Bureau at <www.census.gov/popest/counties/CO-EST2008-01.html>. Estimates are for July 1, 2008.)

The SIP Program is also required under the FCAA to develop a plan to improve visibility in national parks and wilderness areas, such as Big Bend and the Guadalupe Mountains, affecting 362,512 and 163,709 recreational visitors respectively in 2008. The 9,331 residents in Brewster County and 2,431 in Culberson County (total: 11,762) will benefit as well.

(Park population information is from the National Park Service at <www.nature.nps.gov/stats/viewReport.cfm>.)

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

Each state has one SIP that is continually revised to establish control strategies and target dates for reducing emissions that are necessary to attain and maintain the NAAQS set by the EPA for each criteria pollutant.

The SIP describes the steps the state will take to monitor air quality, determine compliance with the NAAQS, and reduce air pollution in the regions that do not meet a particular NAAQS. The SIP also addresses other requirements specified by the FCAA, such as

enforcement programs, preconstruction permitting, etc.

SIP revisions are required when:

- the NAAQS for one of the six criteria pollutants is revised;
- the state submits a request for redesignation when an area attains the NAAQS;
- an area does not attain the standard during the federally specified time frame;
- an area is reclassified (e.g., an ozone nonattainment area is reclassified from a moderate nonattainment area to a serious nonattainment area); or
- new or revised rules are adopted by the EPA that change or add requirements (e.g., the Clean Air Interstate Rule, Clean Air Mercury Rule, and New Source Review reform).

Depending on the complexity of the issues, the development of a SIP revision may require up to four years. The FCAA specifies deadlines for submitting SIP revisions, and provides for sanctions if the deadlines are not met. The EPA generally allows states 12–18 months to correct a failure to submit, after which the federal government is obligated to withhold highway money and require increased emission offsets from companies that want to build new or modify existing facilities. These deadlines may also be modified, clarified, or revised by additional federal legislation and rulemaking or court action, which then changes the time lines for states to complete work associated with SIP revisions.

Please see the flowchart *State Implementation Plan* following Question O.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0151	Clean Air Account	$788,757
0555	Federal Funds	$98,935
5094	Operating Permit Fees	$188,656

Strategy—A.1.1—Air Quality Assessment and Planning

Rider 14 Appropriation: Refinement and Enhancement of Modeling to Demonstrate Attainment with Clean Air Act
Rider 16 Appropriation: Low Income Repair and Replacement Program
Rider 19 Appropriations Limited to Revenue Collection: Automobile Emission Inspections

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

No programs either internal or external to the TCEQ provide identical or similar services or functions of the SIP Program.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

Not Applicable

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

The SIP Program works with the EPA, local governments, metropolitan planning organizations, councils of governments, and stakeholders including industry and environmental groups to develop SIP revisions.

For the Regional Haze SIP, the TCEQ also worked with three groups of Federal Land Managers: the National Park Service, the United States Fish and Wildlife Service, and the United States Forest Service.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

- Expenditures—$270,643

- Four contracts to conduct studies related to highly reactive volatile organic compounds, $PM_{2.5}$, PM_{10}, and regional haze.

Methods used for ensuring accountability for funding and performance include a defined and consistent process for developing, implementing, and tracking projects, including:

- project prioritization in alignment with required work and alignment with agency priorities;

- development of a detailed scope of work to be performed as well as deliverables and due dates; and

- review of all invoices for consistency with contract dates, deliverables, work performed, and allowable expenses.

Current contracting problems include timeliness of invoicing by vendors and the changing of the contracting object code by the comptroller.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

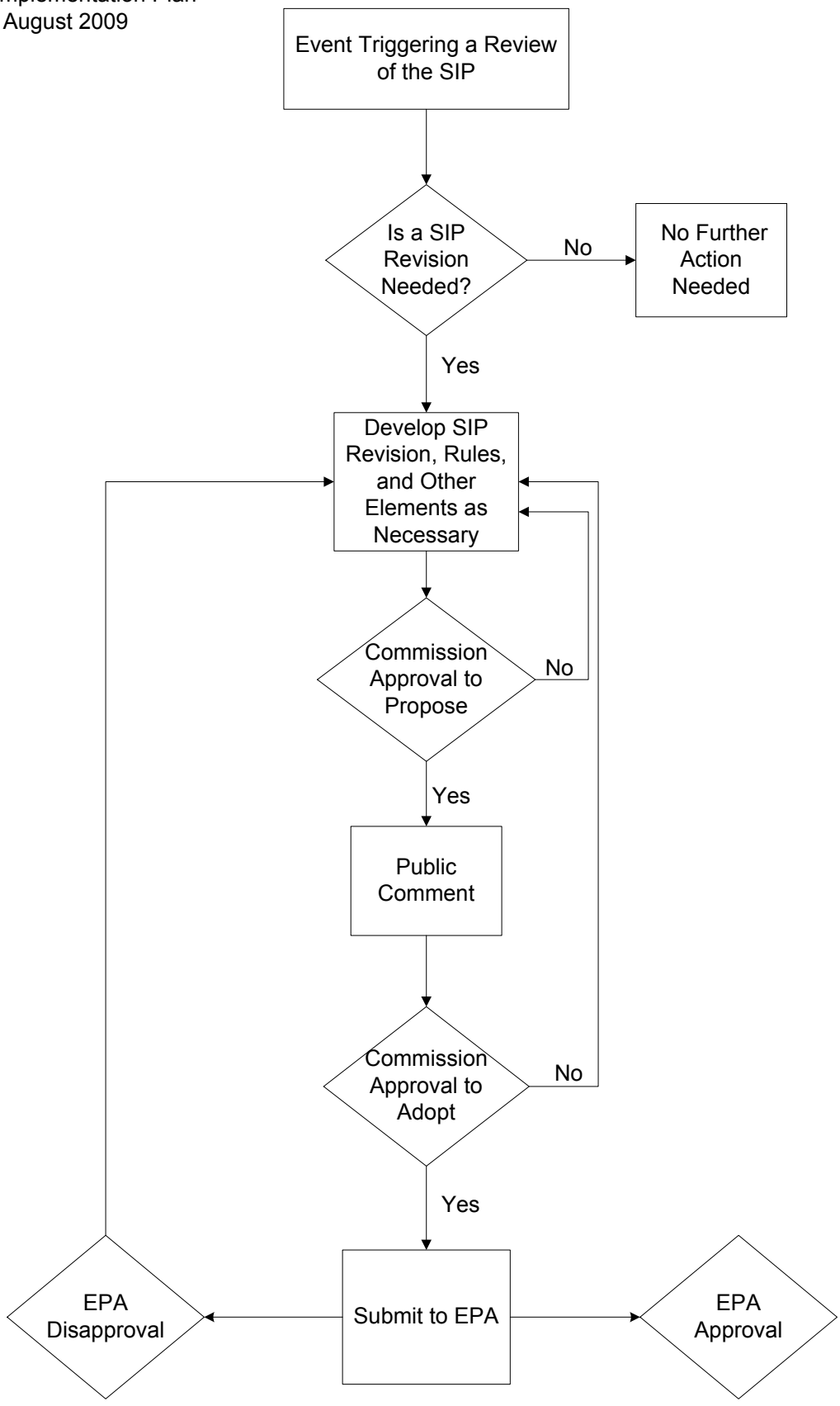
Not Applicable

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable


Event Triggering a Review of the SIP
Is a SIP Revision Needed?
No
No Further Action Needed
Yes
Develop SIP Revision, Rules, and Other Elements as Necessary
Commission Approval to Propose
No
Yes
Public Comment
Commission Approval to Adopt
No
Yes
EPA Disapproval
Submit to EPA
EPA Approval

VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A.Provide the following information at the beginning of each program description.

Name of Program or Function	Stationary and Mobile Source
Location/Division	4th Floor / Building F / Air Quality Planning Section / Air Quality Division / Chief Engineer's Office
Contact Name	David Brymer
Actual Expenditures, FY 08	$52,156,278
Number of FTEs as of August 31, 2008	32

B. What is the objective of this program or function? Describe the major activities performed under this program.

The Stationary and Mobile Source Programs include a number of activities that perform diverse functions in support of the Texas State Implementation Plan (SIP) for air quality. Two areas that predominately focus on stationary sources are Control Strategy Development and Emissions Banking and Trading. Areas that focus on mobile sources include Mobile Emissions Control, MobileEmissions Reduction Grants, Conformity, and Mobile Emissions Inventory.

Control Strategy Development

The Control Strategy Development activity evaluates pollution control strategies and technologies to identify and develop feasible control measures for stationary sources, to help areas of the state attain the National Ambient Air Quality Standards (NAAQS).

Emissions Banking and Trading

The Emissions Banking and Trading Programs are market-based strategies used to address air quality issues throughout Texas. These programs were designed to provide flexibility in complying with the Texas Clean Air Act (TCAA) and the Federal Clean Air Act (FCAA), while also providing incentives to reduce emissions from stationary, area, and mobile sources through the trading of emission reductions within a market-based framework. The TCEQ currently maintains and administers seven different emissions banking and trading programs across the state, each targeting specific criteria pollutants or air quality issues.

Mobile Emissions Controls

The mobile emissions control activities improve air quality through inspection of vehicle emissions control equipment, reducing evaporative emissions from vehicle refueling and

reducing nitrogen oxides (NO_X) and other ozone-forming emissions from diesel fuels. Other activities include the coordination of local mobile emission reduction efforts; such as idling restrictions, transportation control measures, and voluntary mobile emission reduction strategies. Refer to flowchart *Mobile Source Programs* following Question O.

Mobile Emissions Reduction Grants

Mobile emissions reduction grants, such as the AirCheckTexas Drive a Clean Machine Program, improve air quality through incentivizing the replacement of older, high-emitting vehicles by providing financial assistance to eligible owners of vehicles that have failed an emissions test or have a qualifying gasoline powered vehicle that is 10 years old or older.

Conformity

Conformity ensures that federally funded actions and transportation projects will not cause or aggravate a violation of the NAAQS, or delay timely attainment of standards.

Mobile Emissions Inventory

The mobile emissions inventory activity develops emissions inventories and assesses the effectiveness of on-road and non-road control strategies.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

A number of the stationary and mobile source projects are authorized as emissions reduction credits as part of the SIP.

Control Strategy Development

While the Control Strategy Development activity does not have specific performance measure requirements, the control strategies and rules developed by the program have resulted in significant reductions in pollution to help improve air quality in Texas nonattainment areas. Any rules developed by the activity that will be included in the SIP must be approvable by the U.S. Environmental Protection Agency (EPA). See the SIP Program discussion for additional information regarding air quality improvement.

Emissions Banking and Trading

LBB Output Measure 01-02-01.03 – Total Number of Transaction Applications. The total number of transaction applications reviewed for FY 08 was 1,429, approximately 43 percent more than the projected estimate of 1,000 applications.

Mobile Emissions Control

Federal regulations (40 Code of Federal Regulations, Section 51.353) require the inspection and maintenance (I/M) program to perform a program evaluation every two years. The evaluation continues to show that I/M is a vital component of the overall strategies to improve air quality.

Mobile Emissions Reduction Grants

LBB Key Output Measure 01-01-01.07 – Number of Vehicles Repaired/Replaced through LIRAP. For FY 08, 18,492 vehicles were repaired or replaced through Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP), or 123 percent of projections.

LBB Efficiency Measure 01-01-01.03 – Average Cost for LIRAP Repairs. The average cost of each LIRAP repair was $504.61 in FY 08, or 96 percent of projections.

Mobile Emissions Inventory

LBB Key Outcome Measure 01-01-01.03 – Number of Mobile Source Air Quality Assessments. The number of mobile source assessments conducted in FY 08 was 1,268, or 101 percent of projections.

LBB Key Output Measure 01-01-01.02 – Number of Area Source Air Quality Assessments. In FY 08, 2,577 area and non-road mobile source emission assessments were completed, or 103 percent of projections.

LBB Outcome Measure 01-01.01 – Emission Reductions in Ozone Nonattainment Areas. A three percent reduction of volatile organic compounds (VOC) and NO_X emissions from point, area, on-road mobile, and non-road mobile sources in the ozone nonattainment areas was achieved in FY 08. This was half the projected reduction of six percent. The addition of a new source category (oil and gas exploration and drilling rig engines, particularly in the Dallas–Ft. Worth area) in the area source emissions inventory resulted in an increase in areas source emissions inventory that offset the reductions from the point, on-road mobile, and non-road mobile sources.

In FY 09, a new output performance measure was added to separately track the number of non-road mobile source assessments.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

Mobile Emissions Inventory

The Consolidated Emissions Reporting Rule (CERR) expanded the inventory reporting requirement to encompass the whole state, and added additional pollutants in June of 2002. The Air Emissions Reporting Requirements (AERR) replaces the CERR beginning with the 2009 reporting year. Inventories will now run on a 12 month cycle instead of 18 months.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

Control Strategy Development

Rules developed by the activity can affect a wide range of industrial, commercial, institutional, and utility sources. Some rules are only applicable in specified nonattainment areas, such as the Houston-Galveston-Brazoria (HGB) ozone nonattainment area, while other rules apply to larger regions or even statewide. Additional information regarding the

nonattainment areas in Texas is provided in the SIP Program discussion.

Emissions Banking and Trading

The emissions banking activity is available to a wide range of stationary and mobile sources across the state. As of July 2009, there were 569 separate companies or regulated entities that participated in one or more of the emissions banking programs.

Mobile Emissions Control

The vehicle I/M program affects motorists who own gasoline-powered vehicles (excluding motorcycles) that are 2–24 years old and registered and primarily operated in one of the 17 affected counties. The affected counties are Brazoria, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Montgomery, Parker, Rockwall, Tarrant, Travis, and Williamson.

- The Regional Low Reid Vapor Pressure (RVP) Gasoline Program affects fuel producers, importers, suppliers, and retail gasoline-dispensing facilities in the 95 central and eastern Texas counties. Refer to attachment *Counties Participating in Certain Fuel Programs* following Question O for list of counties.
- The El Paso Oxygenated and Low RVP Gasoline Program affects fuel producers, importers, suppliers, and retail gasoline-dispensing facilities in El Paso County.
- The Texas Low-Emission Diesel Fuel (TxLED) Program affects diesel fuel producers, importers, common carriers, distributors, transporters, bulk terminal operators, and retailers. The program covers 110 counties in the central and eastern half of Texas. Refer to attachment *Counties Participating in Certain Fuel Programs* following Question O for list of counties.
- The Stage II Vapor Recovery program affects gasoline-dispensing facilities in: Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Harris, Jefferson, Liberty, Montgomery, Orange, Tarrant, and Waller counties**.** The program staff answer questions as they come up, but actual implementation is handled through the TCEQ's Office of Compliance and Enforcement, which has the necessary authority.
- The Idling Program affects local governments that have signed a Memorandum of Agreement (MOA) with the TCEQ to implement idling restrictions on motor vehicle owners and operators in the local jurisdictions covered by an MOA.

Mobile Emissions Reduction Grants

The grant program is available in counties that conduct annual vehicle emissions testing and elect to participate. The program is currently implemented in the counties of Brazoria, Collin, Dallas, Denton, Ellis, Fort Bend, Galveston, Harris, Johnson, Kaufman, Montgomery, Parker, Rockwall, Tarrant, Travis, and Williamson Counties.

For the AirCheckTexas Drive a Clean Machine Program, an applicant's vehicle must meet certain criteria and their income must be at or below 300 percent of the federal poverty level to be eligible. The program provides eligible owners with vouchers in the amounts of up to $3,000 for a car or truck or up to $3,500 if a hybrid vehicle is purchased. The replacement car must be the current model or up to three model years old. A replacement truck must be a current model and up to two model years old. A hybrid vehicle must be the current model year or preceding model year. All replacement vehicles must meet Federal

Tier 2 Bin 5 emissions standards or cleaner. The program also provides for up to $600 in repair assistance for eligible motorists whose vehicles have failed an emissions test.

Conformity

Conformity requirements apply to federally funded project sponsors and transportation planners in nonattainment and maintenance counties: Hardin, Jefferson, and Orange; Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant; El Paso; and Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller.

Mobile Emissions Inventory

The mobile emissions inventory activity works with the TCEQ's SIP program, air modeling group, local planning groups, councils of governments (COGs), the Texas Department of Transportation (TxDOT), the EPA, and the Federal Highway Administration (FHWA) to provide mobile source emissions inventories for both on-road and non-road mobile sources.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

Timelines associated with work in the stationary and mobile source programs are driven by deadlines established by the EPA under the FCAA. These programs work in conjunction with the SIP program to establish project timelines that will ensure federal requirements are met.

Control Strategy Development Program

This program is administered under the same general process as the SIP Program (see SIP Program flowchart for more information). Any rules developed by the program must conform to agency and the Texas Secretary of State's Office rulemaking guidelines, requirements, and timelines.

Emissions Banking and Trading Program

An overview of the emissions banking transaction process can be seen on the flowchart *Process Flow Diagram*: *Emissions Banking and Trading Project* following Question O.

Mobile Emissions Control Programs

The I/M Program is administered as part of the Texas Department of Public Safety (DPS) vehicle safety inspection program. To obtain a safety sticker in one of the affected counties, a subject vehicle must pass the prescribed emissions tests in addition to meeting the vehicle safety inspection requirements. If a motorist's vehicle is not in compliance, enforcement is through citations issued by law enforcement agencies and registration denial of the subject vehicle.

The Idling Program is administered through MOAs between the TCEQ and local governments. The local government adopts a resolution or ordinance incorporating the TCEQ idling rule into an MOA. The MOA is then signed by the appropriate local official and the TCEQ. Enforcement occurs at the local level.

Mobile Emissions Reduction Grants

The grants are administered via contracts with counties in the ozone nonattainment and maintenance areas. For AirCheckTexas Drive a Clean Machine, the counties in the Dallas-Fort Worth (DFW) area subcontract with the North Central Texas Council of Governments and the HGB area counties subcontract with the Houston-Galveston Area Council to administer the program. Travis and Williamson counties each administer their own program.

Conformity

Conformity links transportation planning with air quality planning, and must be conducted for transportation at least once every four years and before certain non-transportation projects may move forward. This process is led by the local transportation planning group and includes consultation and agreement by related local, state, and federal agencies.

Mobile Emissions Inventory

Agency staff works with Texas Metropolitan Planning Organizations (MPOs) and other Texas mobile source stakeholders, such as airports and construction groups, to develop mobile inventories and assure compliance with transportation conformity requirements.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0151	Clean Air Account	$51,096,189
0555	Federal Funds	$180,232
0666	Appropriated Receipts	$588,938
5094	Operating Permit Fees	$290,919

Strategy—A.1.1—Air Quality Assessment and Planning

Rider 14 Appropriation: Refinement and Enhancement of Modeling to Demonstrate Attainment with Clean Air Act
Rider 16 Appropriation: Low Income Vehicle Repair and Replacement Program
Rider 19 Appropriations Limited to Revenue Collection: Automobile Emission Inspection Fee

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

Emissions Banking and Trading

The Emissions Banking and Trading activity performs some limited functions associated with the federally administered Clean Air Interstate Rule (CAIR) Program; however, these functions are distinct from the functions handled at the federal level.

Mobile Emissions Control Programs

As required by Chapter 382, Subchapter G, of the Texas Health and Safety Code, the I/M program is administered by both the TCEQ and the DPS.

Mobile Emissions Reduction Grants

The federal government began the Car Allowance Rebate System (CARS) Program in July 2009. Financial incentives are given to replace old vehicles with more fuel efficient ones. The CARS program offers credits from $3,500 to $4,500 toward the new vehicle purchase, which cannot exceed $45,000. This program ended in late August 2009.

TCEQ's Drive a Clean Machine Program limits the cost of the newer vehicle to $25,000 or less and offers vouchers up to $3,500 for Tier 2 Bin 5 vehicles. This program requires applicants to meet income requirements, whereas the CARS program has no income requirements. The Drive a Clean Machine Program also allows applicants to purchase used vehicles.

Conformity

Interagency consultation on transportation conformity brings together local, state, and federal air quality and transportation stakeholders in nonattainment and maintenance areas, where all partners serve the same function yet bring particular expertise:

- Metropolitan Planning Organizations (MPOs) develop transportation plans, programs, and projects; participate in the development of SIP revisions; and conduct conformity determinations and associated regional emissions analyses.
- The Texas Department of Transportation (TxDOT) develops transportation plans, programs, and projects; participates in the development of the SIP; and reviews and approves transportation conformity determinations.
- The FHWA, the Federal Transit Administration, and the EPA develop and implement the federal transportation rule and guidance, and reviews and approves transportation conformity determinations.
- The TCEQ promulgates the transportation conformity SIP and associated rule, participates in interagency consultation, and supports agency management with respect to requirements and the consequences of deficiencies.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

Emissions Banking and Trading

The functions performed by this activity for the federal CAIR Program are distinct from those functions managed at the federal level and are stipulated in the CAIR regulations to

avoid duplication or conflict between the state and federal functions.

Mobile Emissions Control
To ensure there is no conflict or duplication of duties in implementing the I/M program, the TCEQ and the DPS initiated an MOU dated December 13, 1996, and updated it on January 22, 1997.

Mobile Emissions Reduction Grants
The federal CARS program is distinct and separate from the TCEQ's AirCheckTexas Drive a Clean Machine Program and has different eligibility requirements.

Conformity
Where a nonattainment or maintenance area is outside the boundary of an MPO, there is an MOA with interagency partners to establish responsibilities for transportation conformity. Such an agreement is in place among the DFW nonattainment area transportation conformity interagency partners.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

Control Strategy Development
Staff conducting this activity periodically meet with EPA representatives, typically from the EPA Region 6 office in Dallas. EPA Region 6 is responsible for reviewing and approving control measures and rules that are included in the Texas SIP. TCEQ and EPA staff occasionally have discussions to help ensure that control measures will be approvable by the EPA.

Emissions Banking and Trading
The Emissions Banking and Trading activity administers specific functions for the federally mandated CAIR program and the remaining functions are administered by the EPA. The Emissions Banking and Trading activity is responsible for reviewing emission allowance applications submitted by the companies subject to CAIR, determining the emissions allowances for each company, and then submitting the allowance information to the EPA. This activity also works with the EPA as needed to ensure that the programs will be federally approved.

Mobile Emissions Control
As any law enforcement agency may issue a citation for an expired vehicle safety sticker, these agencies are assisting in providing enforcement of the I/M program. In addition, the TCEQ works with COGs and local law enforcement task forces by providing data and access to various reports and computer programs to assist in identifying potential fraud in the I/M program.

As the fuel-related components of this program are approved under Texas' SIP, the EPA has the authority to enforce action for noncompliance.

The Idling Program is implemented by having governmental entities sign an idling MOA with the TCEQ. The following cities have signed MOAs: Arlington, Austin, Benbrook, Bastrop, Celina, Colleyville, Dallas, Elgin, Euless, Georgetown, Hurst, Hutto, Lockhart, Luling, Keene, Lake Worth, Lancaster, Little Elm, Mabank, McKinney, Mesquite, North Richland Hills, Pecan Hill, Round Rock, Rowlett, San Marcos, University Park, and Westlake. Counties that have signed an idling MOA with the TCEQ are Bastrop, Caldwell, Hays, Travis, and Williamson.

Mobile Emissions Reduction Grants

Counties in the ozone nonattainment and maintenance areas administer this program. The counties are responsible for ensuring that the funds are appropriately spent, the program requirements are followed, and reports, such as financial status and quarterly reports, are submitted to the TCEQ. Counties in the DFW and HGB areas subcontract with the council of governments to administer the program.

Conformity

MPOs develop transportation plans, programs, and projects; participate in development of the agency's SIP; participate in the interagency consultation process; and conduct conformity determinations and associated regional emissions analyses. The TxDOT develops transportation plans, programs, and projects; participates in the development of the TCEQ's SIP; participates in interagency consultation; and reviews and approves transportation conformity determinations. The FHWA, the Federal Transit Administration, and the EPA develop and implement the federal transportation rule and guidance, participate in the interagency consultation process, and review and approve transportation conformity determinations. The TCEQ promulgates the transportation conformity SIP and associated rule, participates in interagency consultation, and supports agency management with respect to requirements and the consequences of deficiencies.

Mobile Emissions Inventory

When developing inventories, TCEQ staff work with the following government units: EPA, Office of Transportation, Air Quality; EPA, Region 6; North Central Texas COG; Houston-Galveston Area Council; Capital Area Planning COG; Alamo Area COG; Rio Grande Area COG; Coastal Bend COG; East Texas COG; North East Texas Air Care; South East Texas Regional Planning Commission; Central Texas Clean Air Coalition; TxDOT; Texas Transportation Institute; and FHWA.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

- Expenditures: $1,096,924
- Number of contracts: 8

- General purposes of the contracts include:
  - Mobile Source emissions inventory improvements
  - Emissions inventory modeling maintenance
  - I/M program evaluation
  - Drive A Clean Machine Program database development
- The methods used to ensure accountability for funding and performance includes having a defined and consistent process for developing, implementing, and tracking each contract. This process includes: project prioritization in alignment with required work and agency priorities; development of a detailed scope of work to describe the work to be performed as well as deliverables and due dates; review of all invoices to be consistent with contract dates, deliverables, and work performed; and allowable expenses.
- Current contracting problems include timely invoicing by vendors conducting work and changes in the comptroller's contractor object code.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

None

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

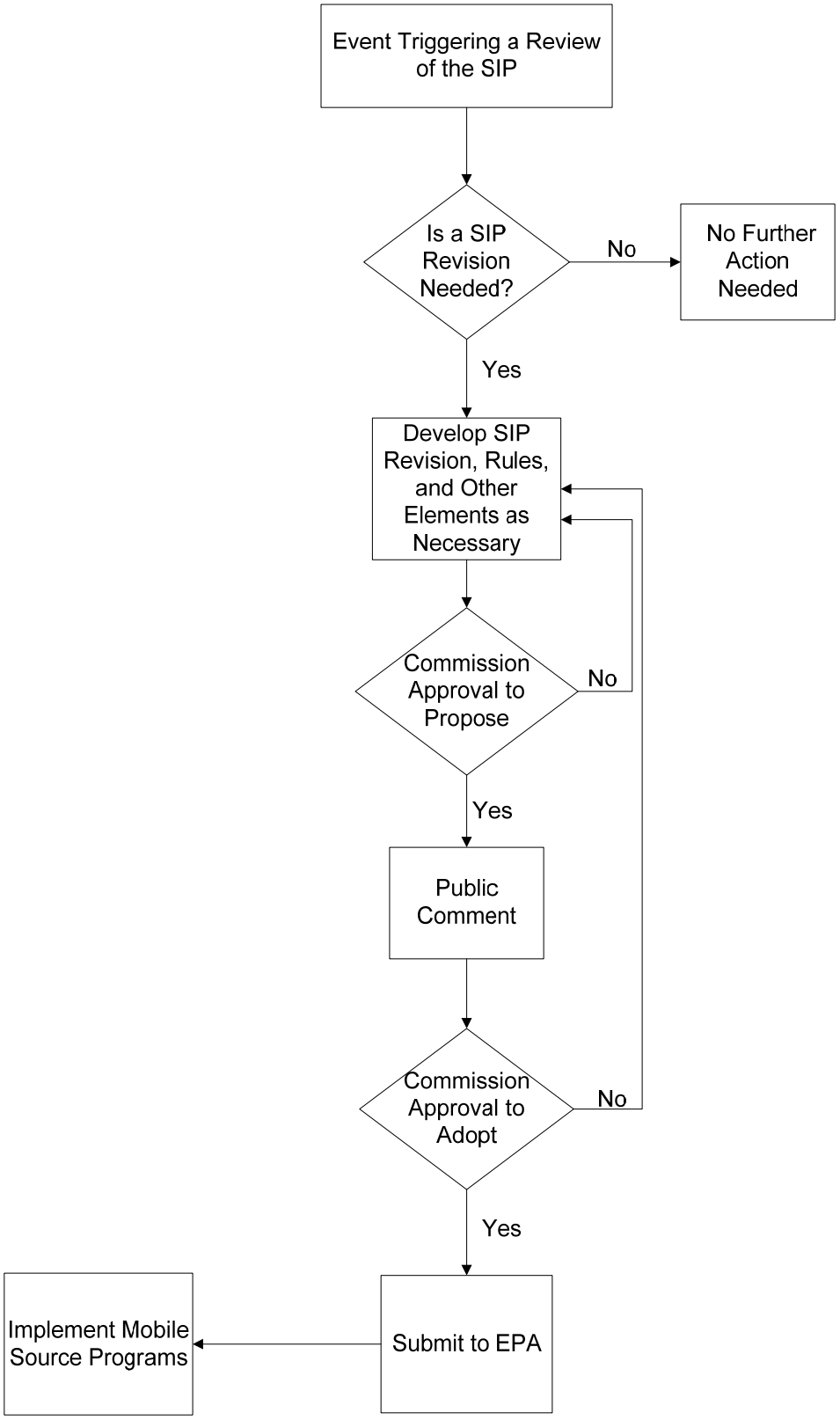
Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

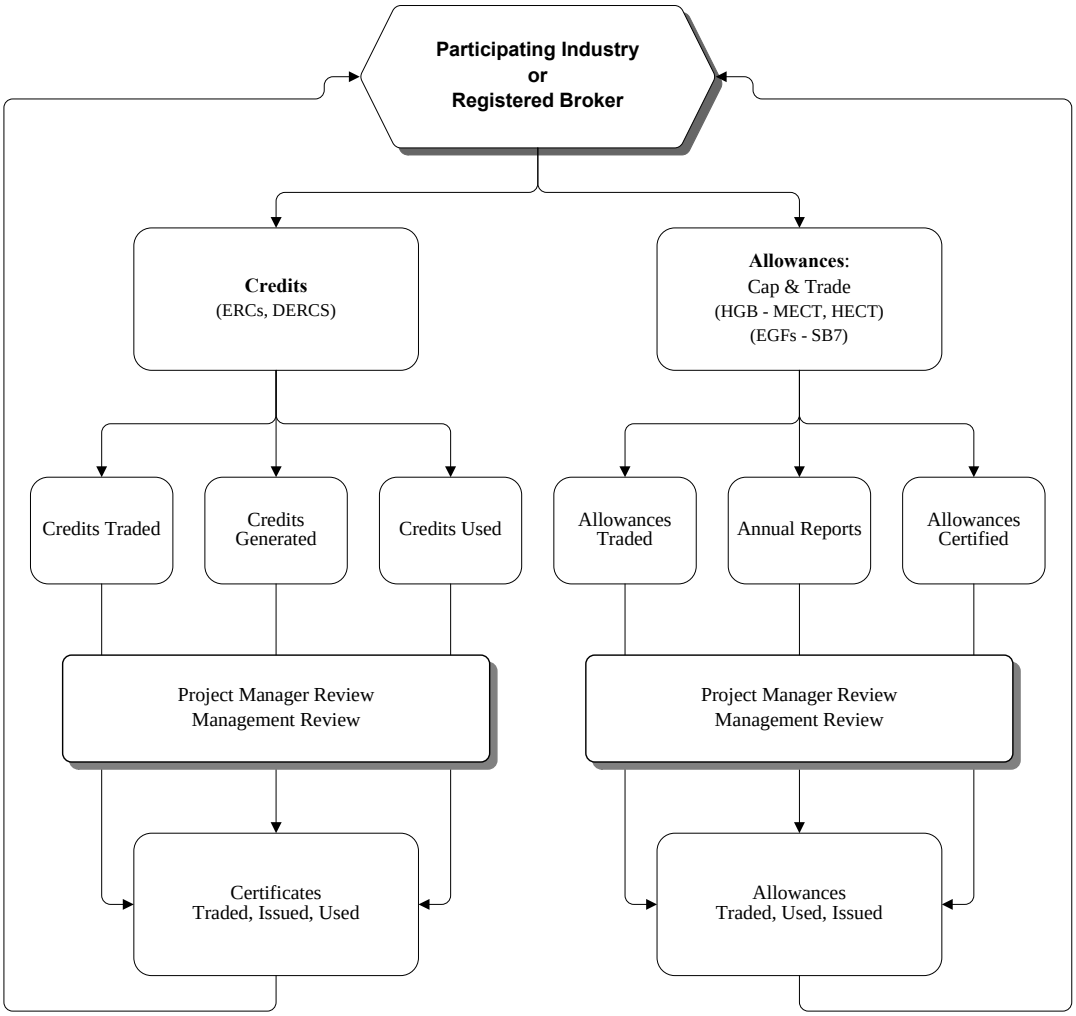
Mobile Source Programs

August 2009



Process Flow Diagram:
Emissions Banking and Trading Project

Economic Incentive Programs for Compliance Flexibility



Acronym	Definition
DERC	Discrete Emission Reduction Credit
EGF	Electric Generating Facilities
ERC	Emission Reduction Credit
HECT	Highly Reactive Volatile Organic Compound Emissions Cap and Trade
MECT	Mass Emissions Cap and Trade
HECT	Highly Reactive Volatile Organic Compound Emissions Cap and Trade
SB7	Senate Bill 7, Emissions Banking and Trading of Allowances*

*Senate Bill 7, 76th Texas Legislature, 1999 Regular Session, Texas Utility Code §39.264

Attachment
Counties Participating in Certain Fuel Programs

RVP Gasoline Program – Participating Counties

The Regional Low Reid Vapor Pressure (RVP) Gasoline program affects fuel producers, importers, suppliers, and retail gasoline-dispensing facilities in the 95 central and eastern Texas counties. The counties are: Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Ellis, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Johnson, Karnes, Kaufman, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Parker, Polk, Rains, Red River, Refugio, Robertson, Rockwall, Rusk, Sabine, San Jacinto, San Patricio, San Augustine, Shelby, Judge Smith, Somervell, Titus, Travis, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson, Wise, and Wood.

TxLED Diesel Program – Participating Counties

The Texas Low-Emission Diesel Fuel (TxLED) program affects diesel fuel producers, importers, common carriers, distributors, transporters, bulk terminal operators, and retailers. The program covers 110 counties in the central and eastern half of Texas, including the Beaumont-Port Arthur, Dallas-Fort Worth, and HGB ozone nonattainment areas. The counties are: Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Karnes, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Polk, Rains, Red River, Refugio, Robertson, Rusk, Sabine, San Jacinto, San Patricio, San Augustine, Shelby, Smith, Somervell, Titus, Travis, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson, Wise, and Wood.

VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Tax Relief for Pollution Control Property
Location/Division	4th Floor / Building F / Chief Engineer's Office
Contact Name	Susana Hildebrand, P.E.
Actual Expenditures, FY 2008	$232,891
Number of FTEs as of August 31, 2008	3

B. What is the objective of this program or function? Describe the major activities performed under this program.

The Tax Relief for Pollution Control Property Program was created in 1993 to provide relief, through property tax exemptions, to individuals, companies, and political subdivisions that make capital investments to meet or exceed environmental regulations. Pollution control property includes pollution control equipment, pollution prevention technology, or changes to processes or methods that meet or exceed existing environmental standards.

The TCEQ is delegated the responsibility for determining whether property meets the requirements for receiving a tax exemption under Texas Tax Code Section 11.31. The program evaluates applications to determine if the property was installed to meet or exceed an adopted environmental regulation, if the use of the property provides an environmental benefit at the site, and if the equipment is used to prevent, monitor, or control air, water or land pollution.

Once reviewed, the property receives a "use" determination. A *positive* use determination means the equipment is partially or wholly for pollution control or prevention. A *negative* determination is issued if the property is not pollution-control property. After a positive determination, the applicant forwards it to the local appraisal district to receive a property-tax exemption.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

The first tax relief application was received on November 21, 1994. Since then, the program has processed 12,618 applications. The total listed property value is $25.2 billion dollars. By rule, until February 7, 2008, the staff had 90 days (not counting response time for deficiencies) to complete the review of an application, and 97 percent of the applications were reviewed within that time frame. Effective February 7, 2008, reviews must now be completed within 63 days; 96 percent have been reviewed within the new time frame. Since

January 1994, the average annual number of applications received is 901; average total listed property value, reviewed annually, is $1.7 billion.

Also since January 1994, the average dollar value listed on an application is approximately $2 million. The highest listed dollar value was $444 million; the lowest, $600. Positive use determinations have been issued for approximately 97 percent of the applications processed. Negative determinations have been issued for one percent of the applications and two percent have been withdrawn by the applicant or returned to the applicant by the program for failure to provide requested information.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

The Tax Relief Program was created in 1993 by the Texas Legislature's passage of HB 1920, which added Section 11.31 of the Texas Tax Code. In November 1993, Texas voters approved Proposition 2 which added Section 1-l to Article VIII of the Texas Constitution. Administrative rules were adopted as 30 Texas Administrative Code (TAC) Chapter 277 and later moved to Chapter 17.

In 2001, HB 3121 amended Section 11.31 by creating an appeals process and requiring the TCEQ to adopt by rule an application review process. The appeals process was adopted as Section 17.25. The application review process was adopted as the Decision Flow Chart (Section 17.15) and the Cost Analysis Procedure (Section 17.17).

In 2007, HB 3732 amended Section 11.31 by adding three new subsections: (k), requiring the adoption of 18 categories of potential pollution-control property; (l), requiring review of the list in (k) at least once every three years; and (m), establishing a 30-day review for applications containing property in one of the categories in (k). The Subsection (k) list was joined with the previous predetermined equipment list and adopted into Section 17.14 as the Equipment and Categories List.

In 2009, HB 3206 and HB 3544 amended Section 11.31 by adding two new subsections. New Subsection (g-1) requires that applications containing equipment adopted under Subsection 11.31(k) be reviewed using the methods and standards adopted under Subsection 11.31(g). New Subsection (n) requires the establishment of a permanent advisory committee which is charged with advising the commission on the implementation of Section 11.31.

The services and functions of the program have not changed since its creation, though it was transferred from the TCEQ's Small Business and Environmental Assistance Division to the Chief Engineer's Office on December 1, 2008. Its purpose is still to determine whether property is used to meet or exceed environmental regulations.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

All businesses and individuals in Texas that have capital expenditures for pollution-control equipment may participate in the program. Historically the primary customers for this program have been industries and other businesses, with the largest number of applications from chemical plants, gasoline service stations, electric utilities, and oil refineries. Over half the applications have been filed by facilities with 2,000 or more employees; 14 percent for facilities with 100 or fewer employees. The TCEQ has received applications from approximately 1,394 individual companies. Twenty-two percent of applications have been for facilities located in Harris County, representing 26 percent of the total dollar value. The following table gives the five counties with the largest number of filings.

Tax Relief Applications—Top Five Counties

County	No. of Applications Received	% of Total Applications Received	Listed Dollar Value	% of Listed Dollar Value of Total Applications
Harris	2838	22%	$6,572,211,945	26%
Dallas	663	5%	203,053,288	1%
Jefferson	543	4%	1,977,199,517	8%
Tarrant	502	4%	378,680,324	2%
El Paso	377	3%	394,347,563	2%
Five-County Total	4923	39%	9,525,492,637	38%

The majority of the applications have been for property constructed or installed to meet sections of the Texas Clean Air Act. The second most common medium cited has been water, primarily for modifications to wastewater treatment facilities, installation of secondary containment devices, or construction or installation of equipment to implement a facility's storm water segregation plan.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

Refer to the flowchart *Steps for Obtaining a Use Determination* following Question O.

The application process consists of three parts:

1. Data entry and administrative review of the application. The administrative review ensures the application is complete. Once an application has been declared administratively complete, the appropriate appraisal district is notified of its receipt.

2. Technical review. All portions of the application are reviewed to ensure that it meets the technical requirements as stated in the rules. Next, the technical-review document is

printed and forwarded for peer review and management approval.

3. Sending the final determination to the applicant and a copy to the appropriate appraisal district.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0001	General Revenue	$232,891

Strategy—C.1.3—Pollution Prevention Recycling

Rider 6. Fee Revenue: Pollution Control Equipment Exemption
Funding is generated by application fees deposited to the General Revenue Fund.

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

There are no programs, internal or external to the TCEQ, that review property in Texas to determine if it qualifies as pollution-control property for exemption from property tax.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

Not Applicable

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

The program is required to notify the appropriate appraisal district that an application has been filed and send the district a copy of the final determination.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

None

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

A better understanding of this program may be gained by reviewing the program Technical Guidelines Manual online at:

<www.tceq.state.tx.us/assets/public/assistance/prop2/forms/program_information.pdf>

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

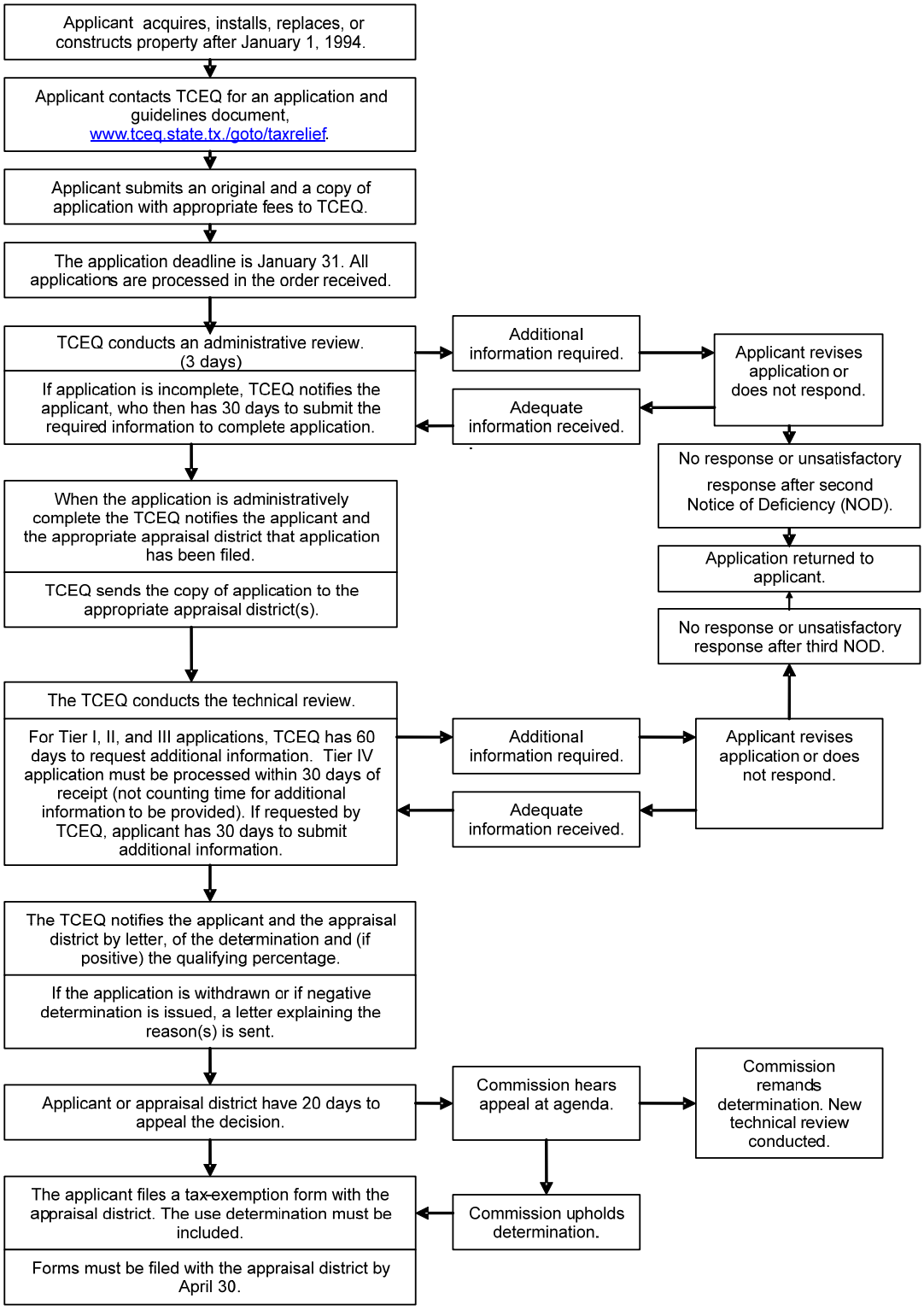
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

STEPS FOR OBTAINING A USE DETERMINATION



VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Total Maximum Daily Load
Location/Division	4th Floor / Building F / Water Quality Planning Division / Chief Engineer's Office
Contact Name	Kelly Keel
Actual Expenditures, FY 2008	$6,073,070
Number of FTEs as of August 31, 2008	13.5

B. What is the objective of this program or function? Describe the major activities performed under this program.

The Total Maximum Daily Load (TMDL) Program is authorized under Section 303(d) of the federal Clean Water Act of 1972, its amendments (U.S. Code 1987), and the implementing regulations.

The TMDL Program works to improve water quality in impaired streams, lakes, and bays by:

- developing TMDLs to determine necessary pollutant reductions;

- developing implementation plans (I-Plans) or watershed action plans, in cooperation with the implementing organizations, to meet pollutant reduction goals; and

- preparing use-attainability analyses (UAAs) to determine how water bodies are used.

Federal regulations require the state to develop a TMDL for impairments in a particular water body. The TMDLs are created for specific parameters and specific uses where a segment is impaired. A water body segment is impaired if the standard established for an indicator parameter is not met for a specific use. A water body segment is a portion of a water body. Segments are further divided for purposes of assessment and restoration into assessment units. Five general categories of use are defined under the Texas surface water quality standards: aquatic life, contact recreation, public water supply, fish consumption, and general. For example, if a stream did not meet the contact-recreation use standard because of high concentrations of indicator bacteria and the aquatic-life use standard due to low concentrations of dissolved oxygen, two TMDLs would be required—one for bacteria and another for dissolved oxygen. From 1998 through 2008, the EPA's implementing guidance required one TMDL for each impairment in each segment. Since the beginning of federal FY 09, the EPA has modified its implementing guidance to require one TMDL for each impairment in each assessment unit. Waters that do not attain one or

more standards for their use are identified in category 5a of the state's Section 303(d) list. The Surface Water Quality Monitoring Program (SWQM) monitors and evaluates the physical, chemical, and biological characteristics of aquatic systems and produces the Section 303(d) list biennially.

A TMDL estimates the amount of a pollutant that a water body can assimilate daily and continue to meet water quality standards. The load is divided among the sources of pollution in the watershed. An I-Plan describes how the pollutant reductions described in the TMDL will be achieved. It identifies the actions that will be taken to restore water quality conditions and establishes the means by which these actions will be tracked, evaluated, and reported. A UAA is a structured scientific assessment of the factors affecting the attainment of the use, which may include physical, chemical, biological and economic factors.

The TMDL Program is also responsible for coordinating with permits regarding the implementation of TMDLs. This coordination includes reviewing wastewater permits issued in TMDL watersheds to ensure that the permits comply with the requirements in the TMDL; revision of load allocations of existing TMDLs to adapt to changes in land use and population; and providing updates to the Water Quality Management Plan (WQMP).

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

LBB Output Measure 01-01-02.01 Number of Surface Water Assessments Completed.
In FY 08, the TMDLs and I-Plans contributed to the 65 surface water assessments completed, or 97 percent of the annual projection was attained. These TMDLs and I-Plans are designed to restore support of healthy aquatic communities, swimming and other forms of contact recreation, the safety of fish consumption and oyster harvesting for commercial use, and general water quality.

TMDLs Adopted
In FY 08, the Commission adopted 30 TMDLs for 66 assessment units and four I-Plans for TMDLs in 25 assessment units.

TMDL Restorations
From its inception through August 2008, the TCEQ TMDL Program restored water quality in 72,827 lake acres, 986 stream miles, and 73 estuary square miles. In 2008 ongoing restoration was under way for 72,827 lake acres, 986 stream miles, and 73 estuary square miles.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

In 1998, the TMDL Program began as a separate unit of the TCEQ's Water Quality

Management Division in what was then the Office of Water Resource Management.

Prior to 2002, the TMDL Program was responsible for addressing all impairments on the Section 303(d) list—impairments requiring TMDLs, as well as impairments that required a review of their standards, and for which more data were needed before determining a course of action.

By 2005 the TMDL Program was assigned solely to develop TMDLs and I-Plans. The Surface Water Quality Monitoring Program and the Surface Water Quality Standards Program addressed segments for which more data was needed or for which the standards needed review.

In 2008, with the TCEQ's creation of the Water Quality Planning Division in the Chief Engineer's Office, the TMDL Program became responsible for assisting the Water Quality Standards Group with determining the appropriateness of current standards by conducting UAAs, as well as for developing TMDLs and I-Plans.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

The TMDL Program is developing or implementing TMDLs in 130 of the 254 Texas counties. The individuals and organizations that use a water resource, or contribute or control pollution to it, are stakeholders in the TMDL Program. Although not an exhaustive list of possible stakeholders, the following categories give some examples of the kinds of groups and people who may become involved in protecting and restoring water resources:

- *Wastewater dischargers*—municipal and industrial.

- *Public*——individuals; civic groups such as those representing environmental, consumer, recreational, and community interests; schools, universities, and private landowners.

- *Agriculture and aquaculture*——corporate and individual farmers, ranchers, and producers; subsistence and commercial harvesters of fish and shellfish; agricultural groups and organizations.

- *Business*—commercial and industrial firms; utilities; business groups and trade associations.
- *Government*—city, county, regional, state, federal, and international governmental agencies, tribes, utility districts, and river authorities.

There are no eligibility requirements for participation in the TMDL projects and project development meetings are open to anyone. The TMDL Program is inclusive of the public and of cooperating local, regional, state, and federal organizations, both governmental and nongovernmental.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

The federal mandate for state TMDL programs is contained in the Clean Water Act of 1972 and its amendments (U.S. Code 1987). Section 303(d)(1)(C) of the Clean Water Act and the EPA's implementing regulations issued in 1992, and contained in Title 40, Code of Federal Regulations, Part 130 (40 CFR 130), currently govern the states' TMDL programs. Under 40 CFR 130, states must identify waters where effluent limitations alone are not sufficient to meet water quality standards. Every two years, the identified water bodies are compiled in a record called the "303(d) list," after its implementing legislation. Public participation in the development of TMDLs is mandated in federal regulations [40 CFR 130.7(a)], which also require that the state's process for involving the public in TMDLs be described in the state's "continuing planning process." Texas Water Code 5.107, relating to Advisory Committees, authorizes the commission to create and consult with advisory committee members. All adopted TMDLs are included in the state's Water Quality Management Plan-WQMP (40 CFR 130). When revising the TMDLs through the WQMP, the TCEQ follows the public participation requirements of 40 CFR 25, as well as applicable state law found in Texas Water Code Chapter 26.

The total pollutant load to a water body is derived from determining the amount of loading from point, nonpoint, and natural sources. The TMDL distributes portions of the water body's assimilative capacity to various pollution sources—including natural background sources and a margin of safety—to ensure that water quality standards are met. The following activities occur during the development of a TMDL, shown in the flowchart *Technical approach to developing TMDLs* following Question O.

- Collect and review all the data currently available about the causes and sources of the pollutant of concern. This step is usually referred to as a "historical data review."

- Analyze the available data to determine whether there is sufficient information to begin developing the TMDL or if more data are necessary.

- Identify additional data needed and develop a plan to gather them.

- Gather additional data as needed through monitoring, surveying possible sources, and other means.

- Analyze the complete data set to determine how to allocate the pollutant load among its sources and the amount by which loading must be reduced to attain standards.

- Draft the TMDL for public comment.

The TMDL approval process, shown in the flowchart *Process for TMDL development and*

approval following Question O, includes the following steps:

- Public notice;
- Response to public comment;
- Consideration by the commission, and as appropriate by the Texas State Soil and Water Conservation Board (TSSWCB); and
- Submission to the EPA for approval.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0555	Federal Funds	$3,953,628
0001	General Revenue	$2,080,992
0153	Water Resource Management Account	$38,450

Strategy—A.1.2—Water Assessment and Planning

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

In Texas, two agencies, the TCEQ and the TSSWCB, have primary responsibility for developing TMDLs. The TCEQ is the State's lead agency for addressing pollution from all sources, except nonpoint sources from agriculture and silviculture (forest management). The TSSWCB is the lead agency for preventing and abating agricultural and silvicultural nonpoint source pollution.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

The TCEQ and the TSSWCB work closely on many TMDL projects. Accordingly, a Memorandum of Agreement (MOA) has been executed describing how the two agencies will cooperate in their mandated tasks to manage water quality. The MOA sets forth the cooperating responsibility and authority regarding development of TMDLs.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

The EPA gives guidance for the TMDL Program and issues grants for assessing water quality and implementing protection and restoration plans.

River authorities, councils of governments, soil and water conservation districts, county and city governments, and the regional offices of state agencies all play key roles in organizing and advertising regional forums for public participation in TMDL projects. The program works closely with these organizations to develop strategies for conducting TMDL projects and to enlist their help in engaging the public in the affected watershed. In addition, these organizations often have environmental divisions responsible for regional management of environmental quality.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

- Total expenditures: $5,184,560.

- Number of contracts: 48 for scientific and technical services as well as for grants to implement projects.

- The development of TMDLs and I-Plans includes sampling of water bodies, development of models, evaluation and analysis of scientific data, and public outreach and education. Through contracting, the TMDL Program is able to conduct more projects in a set period of time. Activities such as sampling and public outreach and education are time intensive. In addition, contracts are necessary to obtain specialized expertise, such as modeling, that is not available within the program.

- Contract monitoring activities include obtaining supporting documentation for planned contracts; holding post-award conferences; reviewing contract requirements; using checklists to review work products, progress reports, subcontracts, invoices, receipts, time sheets and travel logs; assessing risk and performing on-site monitoring of work and financial records; conducting annual contractor evaluations; following up to ensure that corrective actions have been taken when necessary; and following standard operating procedures.

- The program experienced no contracting problems in FY 08.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

During the 81st Legislative Session, HB 3891 revised Section 12.011 of the Parks and Wildlife Code by adding subsections (c) and (d). These subsections require within a specified timeframe, a written response by an agency with statewide jurisdiction to each recommendation or comment made under Section 12.0011, Subsection (b) of the Parks and Wildlife Code. As the state agency responsible for protecting the state's fish and wildlife resources, the Texas Parks and Wildlife Department (TPWD) is often a stakeholder in the TMDL process. The TPWD provides information, formal and informal comments, and recommendations and assistance to the TCEQ. However, the requirement to respond in writing could limit the productive exchange of information and ideas.

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

Texas surface waters are monitored routinely by the Surface Water Quality Monitoring Team in cooperation with partners across the state. As required by the Clean Water Act, the data are analyzed every two years to assess the water bodies for compliance with the Texas Surface Water Quality Standards (30 TAC 307.1–10). Water bodies not meeting the quality standards are placed on the list of impaired water bodies known as the 303(d) list. The water bodies on the list are addressed in three ways. A use attainability analysis may be conducted to determine if the correct use is designated for a given water body, additional data may be gathered to confirm the impaired status of the water body, or a TMDL project may be conducted. The TMDL project will develop a watershed plan to improve water quality and establish general limits for sources of pollutants causing the impairment. Through these three methods, sometimes in combination, a water body may be removed from the 303(d) list.

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

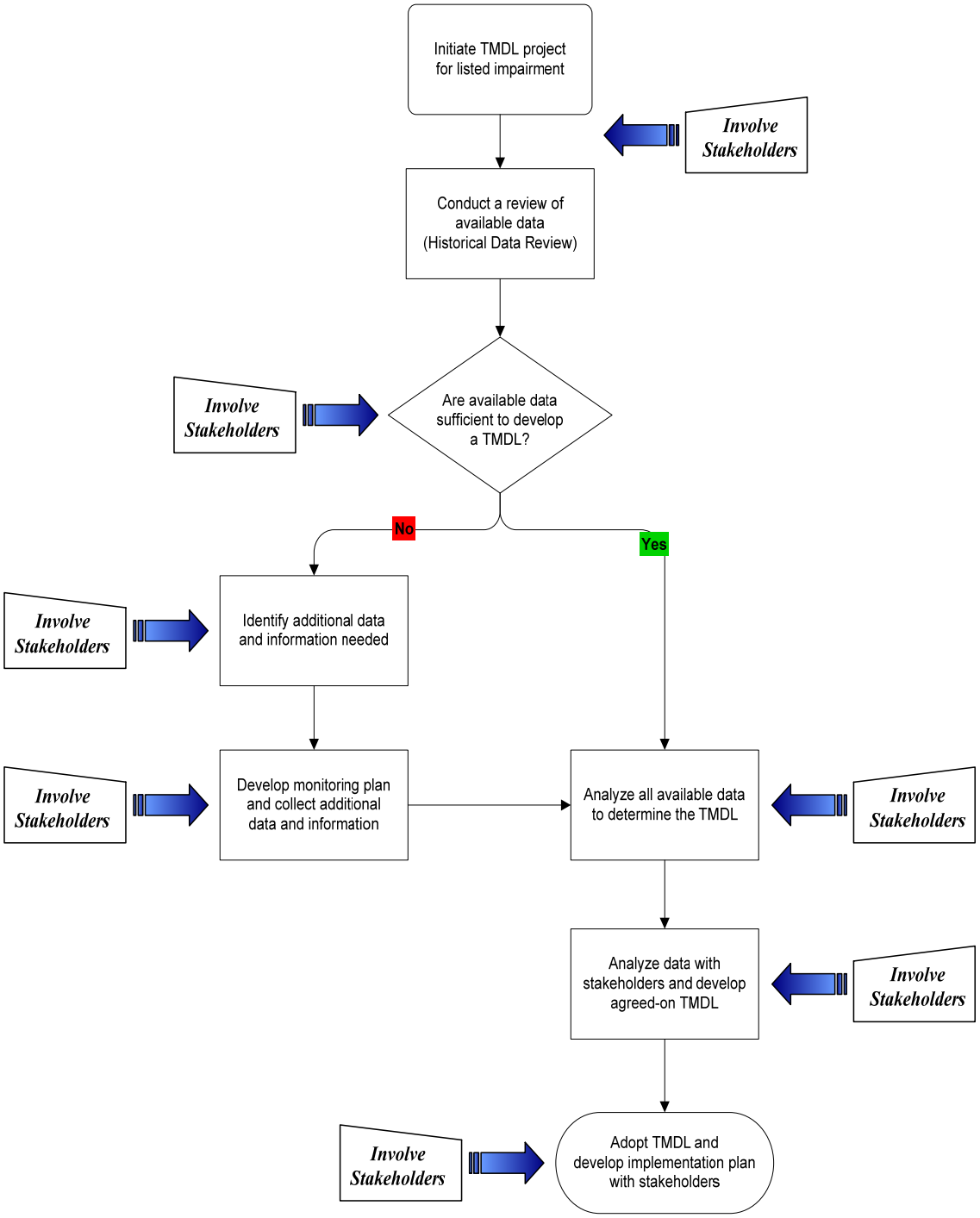
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

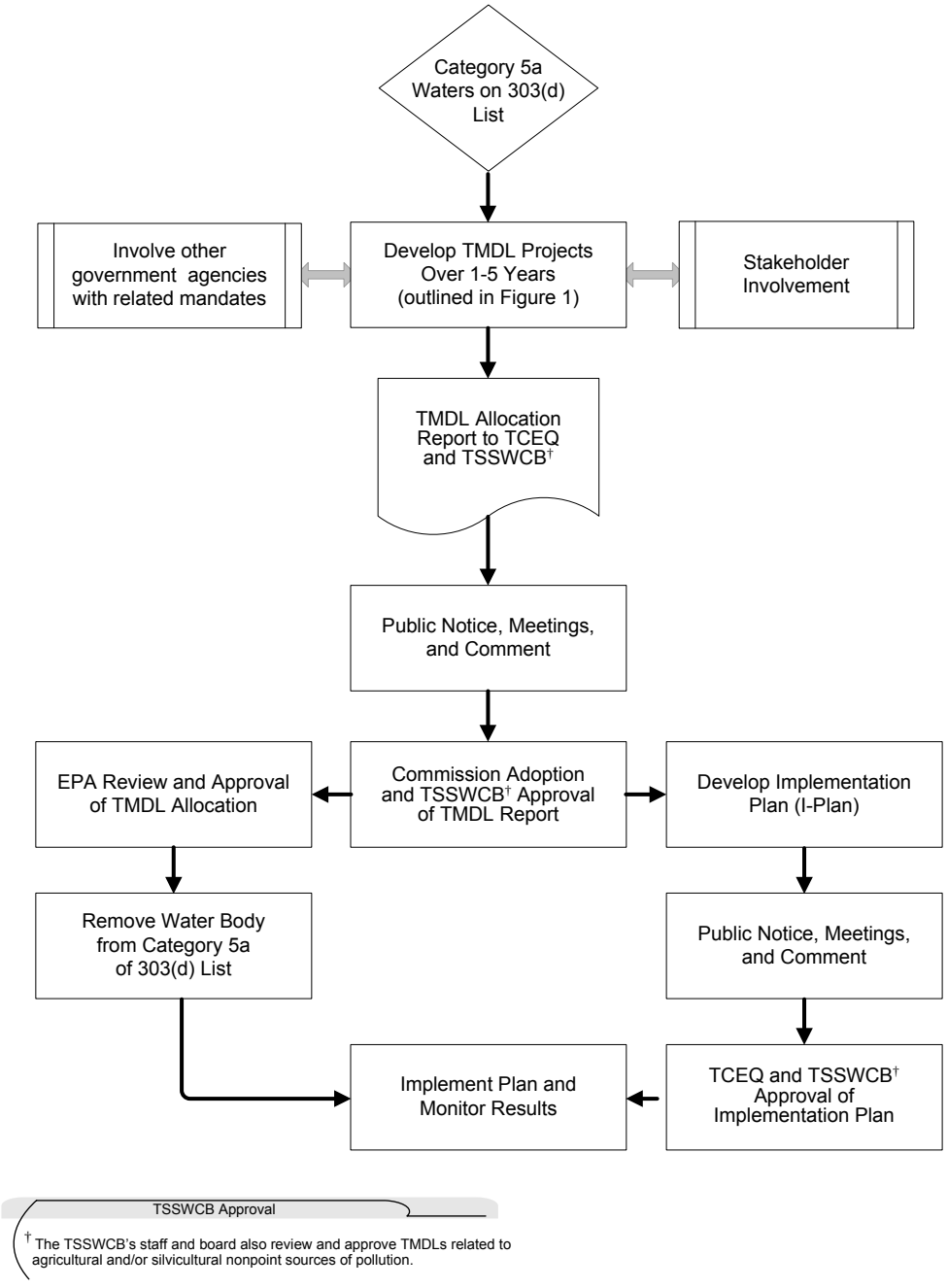
O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

Technical approach to developing TMDLs



Process for TMDL development and approval



VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Toxicology
Location/Division	4th Floor / Building F / Toxicology Division / Chief Engineer's Office
Contact Name	Michael Honeycutt, Ph.D.
Actual Expenditures, FY 2008	$1,248,575
Number of FTEs as of August 31, 2008	14

B. What is the objective of this program or function? Describe the major activities performed under this program.

The objective of the Toxicology Division (TD) is to support all Texas Commission on Environmental Quality (TCEQ) offices and programs with respect to toxicology, risk assessment, and health effects. The TD helps the TCEQ make scientifically sound decisions and focus agency resources by applying toxicological principles when evaluating environmental data, issuing authorizations, developing environmental regulations, and making policy decisions. An important role of the TD is to help further consistency between programs by coordinating all agency activities that assess risks to human health. The TD toxicologists identify chemical hazards, evaluate potential exposures, assess human health risks, and communicate risk to the general public and stakeholders.

A critical role of the TD is to support human health and toxicology outside the agency by answering questions and responding to inquiries from the public, the media, regulated entities, stakeholders, legislators, and other government agencies regarding the activities and functions of the TCEQ.

Significant activities of the TD include:

- Development, peer review, and publication of *Guidelines to Develop Effects Screening Levels, Reference Values, and Unit Risk Factors* (2006).

- Developing effects screening levels (ESLs), reference values (ReVs), and unit risk factors (URFs) used in health effects reviews of air permitting, evaluation of air monitoring data, and in the Texas Risk Reduction Program (TRRP) rule.

- Improving air quality by conducting health effects reviews of air permit applications, amendments, and other authorizations. The TD gives timely support to the Air Permits Division and to the public regarding air permits.

- Improving air quality by evaluating the health protectiveness of air monitoring data. The TD evaluates data collected by the regional offices, the ambient air monitoring network, during mobile monitoring trips, and from industry-sponsored air monitors to determine whether there is any potential for adverse effects on health and welfare from exposure to the measured air pollutants.

- Improving air quality by maintaining the Air Pollutant Watch List (APWL). The TD has developed and adopted the process and procedure for identifying pollutants and areas for the APWL. The procedure for adding pollutants and areas, directing agency resources toward resolving problem pollutants and areas, and for removing pollutants and areas from the APWL has been formalized. In addition, the process has been made more transparent with opportunities for public input and notifications sent to local elected officials and state legislators when an APWL change is contemplated. The APWL has also been made more accessible on the internet.

- Ensuring the health protectiveness of remediation activities by reviewing portions of remediation risk assessments relating to health effects and assisting the Remediation Division in developing protective concentration levels.

- Representing the agency at public meetings, hearings, and testifying at legislative hearings.

- Assisting the regional offices with evaluations relating to health effects of air, soil, groundwater, surface water, and sediment data.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

No specific performance measures or key measures are associated with the TD. However, it is highly regarded and respected both within and outside the TCEQ. Inquiries from the public, legislators, the media, other agencies, and staff are responded to promptly, usually in less than 24 hours. In a typical year, TD personnel attend anywhere from 20 to 40 public meetings on air permits, remediation projects, or at the request of legislators, management, local agencies, or citizen organizations. The TD accomplishments in specific areas are discussed further below.

Air Permit Reviews. The TD completed 135 air permit reviews for the air permits division and responded to over 500 requests for interim ESLs for chemicals not on the current ESL list and added those to the list during FY 08. Also in FY 08, the TD responded to approximately 200 technical inquiries regarding preliminary ESL reviews.

Air Monitoring Reviews. The TD completed 53 reviews of air monitoring data collected by the regional offices in FY 08. In addition the TD completed annual reviews of ambient monitoring data in six regions of the state and reviews of nine mobile monitoring trips. The regional reviews are focused on site-specific issues and chemicals, the annual reviews

summarize all the ambient data available for an entire TCEQ region, and the mobile monitoring reviews focus on specific areas of concern with multiple potential sources of air pollutants.

APWL Areas and Chemicals. Although no new areas or chemicals were added to the APWL and none were removed in FY 08 significant progress has occurred over the past several years in addressing air quality issues in APWL areas. As a result of a significant focus of agency resources, the TD has been able to remove four areas from the APWL since 2004 and several chemicals from two other APWL areas. As of July 2009, there were 12 active APWL areas in the entire state. Combined, the 12 APWL areas cover nearly 225 sq mi. However, APWL areas account for less than 0.1 percent of the total surface area of Texas (nearly 270,000 sq mi).

Final ESLs. The TD finalized approximately 20 development support documents (DSDs) for ESLs in FY 08 for high-priority chemicals and their isomers. Each DSD was proposed, went through a public comment period, and was finalized. The DSD for 1,3-butadiene went through a formal independent peer review and the DSD for formaldehyde went through an external technical review prior to finalization.

Remediation Documents. The TD reviewed at least 30 documents and several data sets for the Remediation Division in FY 08. The TD participated in at least nine public meetings or meetings with elected officials and at least five other meetings with members of the public concerning remediation sites in FY 08.

TRRP Toxicity Factors. The TD developed oral toxicity factors for about 10 chemicals and inhalation toxicity factors for about 10 chemicals in FY 08 that were incorporated into the 2009 TRRP tables.

Groundwater Contamination (HB 3030). The TD addressed 39 groundwater contamination sites in FY 08 with letters sent to adjacent landowners and follow-up human-health support via phone calls, e-mails, and occasionally public meetings.

D. Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

In general, the TD has added functions and gained in importance at the agency since its inception as part of the Texas Air Control Board.

- **2003:** A reorganization at the TCEQ changed the Toxicology and Risk Assessment Section (TARA) to the Toxicology Section (TS). In addition, the section was moved from the Office of Permitting, Remediation, and Registration to the newly created Chief Engineer's Office.

- **2009:** The TS became the TD. The move from a section to a division reflects the increased responsibilities and importance placed on the functions of the TD, both internally and externally to the agency.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

Air. Indirectly, the ESLs developed by the TD affect regulated air permit holders and impact compliance and enforcement decisions related to air monitoring. Health-based toxicity values are used to evaluate air quality and affects citizens and industries in APWL areas.

APWL. The addition and removal of areas and chemicals to the APWL directly affect industries and local communities by drawing agency attention to these areas. Additional attention may lead to cooperative agreements with industry to make changes, additional monitoring, more stringent air permit requirements, and compliance and enforcement investigations. Based on figures from the 2000 census, nearly 11,000 people are estimated to live within the boundaries of the 12 APWL areas. However, the current APWL areas include less than 0.06 percent of the nearly 21 million people in Texas in 2000.

Soil and Water. The toxicity factors provided to the Remediation Division affect the calculation of protective concentration levels (PCLs) in soil and water for the TRRP rule and affect remedial decisions. These toxicity factors and PCLs are also used by the regional offices to prioritize contamination issues and make decisions about local issues and other central office programs to quickly determine whether human health issues may exist at sites.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

The TD functions as a team under the division director to respond to all internal and TCEQ-related external requests for toxicology and human health assistance. The TD is part of the CEO, and all TD personnel are located at the central TCEQ office. Each support function of the TD is administered a little differently, depending on the internal program that is supported, or the external stakeholder that is supported. Refer to the flowchart *Toxicology Division Functions* following Question O.

External Support

Citizen Calls

Citizen questions, calls, and e-mails about human health and toxicology are answered daily by toxicology personnel. If an answer is not immediately available to a question or concern, every attempt is made to find the answer within 24 hours.

Legislative Requests

The TD serves a critical role in reviewing legislative issues during the session each biennium, in addition to special legislative requests at any time. A goal of the TD is to

provide prompt, accurate, scientifically sound responses on human health and toxicology issues.

Media Responses
The TD is often called upon to answer media inquiries on human health and toxicology issues. The division works with Media Relations as appropriate to ensure prompt, accurate, and state-of-the-science responses to the media.

Other Government Assistance
The TD routinely works with local municipal and county environmental agencies (i.e., City of Houston and Harris County), other state agencies (i.e., Department of State Health Services and the Railroad Commission), and federal agencies (i.e., the Environmental Protection Agency (EPA) and the Agency for Toxic Substances and Disease Registry) to provide the latest scientifically based health and toxicology information.

Advocacy and Other Groups
The TD works with advocacy and industry groups to explain the scientific basis of TCEQ positions on human health and toxicology issues. In addition and as appropriate, the TD collaborates with citizen advocacy groups, industry groups, and semi-government organizations like the Mickey Leland National Urban Air Toxics Research Center.

Academic Research and Peer Review
The TD communicates with experts on human health, toxicology, and epidemiology at universities in Texas and elsewhere to supply and obtain the latest relevant information. The TD participates in some agency sponsored research, and serves as technical adviser on non agency sponsored research. In FY 08 the TD was involved in several air quality research projects and used outside peer review for its DSD activities.

Internal Support

Air Permits
The TD reviews air permit applications, amendments, and renewals to determine whether the predicted air concentrations resulting from emissions are protective of human health and welfare, odor, and vegetative effects.

Air Monitoring
The TD reviews air monitoring data collected by various ambient monitoring networks in the state, in addition to data collected by mobile monitoring trips and the regional offices. Annual interoffice memoranda that evaluate the available monitoring data in each region are prepared for each Regional Director. Mobile monitoring data are evaluated by the TD via interoffice memoranda, and interoffice memoranda or e-mail reviews of regionally collected data are prepared by the TD.

Effects Screening Levels
The TD develops ESLs, ReVs and URFs, which are used to evaluate air permits and air monitoring data. These values are also incorporated into the TRRP rule for the remediation division.

Air Pollutant Watch List
The TD uses air monitoring data, emissions estimates, health and odor complaints, and compliance investigations to make recommendations on areas of the state that need additional TCEQ resources to address particular air contaminants. This information forms the basis for the administration of the APWL.

Groundwater Contamination—HB 3030 (78th Legislative Session)
When groundwater contamination is discovered by the TCEQ, the TD is responsible for notifying adjacent well owners of the detected contaminant, the levels measured, and whether there are potential health concerns from using the water. There are legislatively mandated timelines and actions required of the TCEQ to provide notice to landowners.

Water Contamination
The TD supports the TCEQ with answers to human-health and toxicology questions about contaminants in public drinking water, private drinking water, and surface water.

Waste
The TD supports the Waste Permits Division by helping to evaluate human health concerns with exposure to contaminated waste and reuse of materials for applications other than for which they were originally intended.

Remediation Risk Assessments
The TD provides support to the Remediation Division by technically reviewing assessments of human health risk and evaluating data on chemicals in soil, sediment, groundwater, and air for remediation sites.

Texas Risk Reduction Program Rule
The TD helped write the TRRP rule and continues to give technical support and guidance on toxicology and human health issues related to the rule. Each year the division updates the toxicity factors used to calculate risk-based exposure levels for ingestion, inhalation, and dermal contact with soil, sediment, groundwater and air, and protective concentration levels for soil, sediment, and groundwater.

Regional Office Support
The TD routinely answers human health and toxicology questions from the regional offices regarding soil, sediment, groundwater, surface water, and air exposures. The TD staff support may include conference calls with regulated entities, citizens, and other personnel, and participation in public meetings.

Enforcement Support
The TD supports enforcement efforts by the TCEQ by providing technical information on human health and toxicology issues.

Office of Legal Services
The TD supports the Office of Legal Services by providing expert testimony or technical information on human health and toxicology issues, including participation in public hearings.

Executive and Commissioner Requests
The TD is routinely called upon by the Office of the Executive Director, and individually by the commissioners, to answer questions, brief them on topics, attend public meetings, or assist them in responding to human-health and toxicology issues as they arise.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0151	Clean Air Account	$424,737
0153	Water Resource Management Account	$412,700
0549	Waste Management Account	$102,199
0555	Federal Funds	$175,248
5094	Operating Permit Fees	$133,691

Strategies
A.1.1—Air Quality Assessment and Planning
A.1.2—Water Assessment and Planning
A.1.3—Waste Assessment and Planning
A.2.3—Waste Management and Permitting

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

No other internal TCEQ programs duplicate the efforts of the TD, although several complement it. Water programs that must consider human health include the Public Drinking Water Program and the Water Quality Assessment Program. In addition, the ecological risk assessment program in the Remediation Division has some similar functions to the TD; however, its focus is ecological health.

The state agency that has functions that are most similar to the TCEQ is the Department of State Health Services (DSHS). The DSHS has an Environmental and Injury Epidemiology and Toxicology Unit that uses principles of epidemiology, toxicology, and surveillance to identify populations at risk, to develop evidence-based actions, and to protect and promote the health of the people of Texas. This unit has specific legislatively mandated functions

that are different than those of the TCEQ TD. Some of the DSHS unit's functions include operating the Texas poison center network; running the environmental and occupational epidemiology program; conducting epidemiology and health studies; maintaining the Emergency Medical Services (EMS) and trauma registry; evaluating diabetes epidemiology; conducting several surveillance programs (asbestosis, silicosis, blood lead, hazardous substance emergency events, pesticide exposure); and running the fluoridation program.

There are toxicologists at other state agencies including the Railroad Commission who deal specifically with remediation issues that are under their regulatory authority and the Agriculture Department that deal exclusively with pesticide registration, application, and releases. The Department of Public Safety has emergency-response capability for hazardous waste spills and releases but does not hire its own toxicologists. In addition, the Department of Transportation works on mobile source issues and environmental impact statements, but does not specifically hire toxicologists.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

The TD has regular communication with the DSHS on cross-jurisdictional issues, for public meetings, and for coordinated responses to citizen questions on health effects and toxicology. For example, groundwater contamination may be discovered in a private well as a result of remediation activities. The well owner may call with specific questions about health concerns related to drinking the water, or using it for showering or gardening. The TD would respond. The well owner may then ask about a particular form of cancer that seems to be occurring at higher rates than normal in his or her family or neighborhood. Those questions would be answered by the DSHS in coordination with the family's physician. In addition to site-by-site responses to citizens, the two agencies participate in several joint public health efforts.

<u>Texas Environmental Health Institute (TEHI)</u>
In 2001, in response to citizen concerns about the potential impact of environmental pollutants on their health, the Texas Legislature passed legislation establishing the Texas Environmental Health Institute as a joint venture between the Texas Department of Health—predecessor to the DSHS—and the Texas Natural Resources Conservation Commission (TNRCC), predecessor agency to the TCEQ. Texas Health and Safety Code, Section 19.01, directed the TCEQ to enter into an agreement with the DSHS to jointly establish the institute to examine ways to identify, treat, manage, prevent, and reduce health problems associated with environmental contamination.

On December 6, 2001, the TNRCC and the Texas Department of Health entered into an Interagency Memorandum of Agreement pursuant to the Interagency Cooperation Act, Texas Government Code, Chapter 771. The purpose of the agreement was to establish the institute and to describe the tasks to be performed and the duties and responsibilities of each of the agencies in enabling the institute to accomplish its purposes. The Institute was

established within the Environmental Epidemiology Division (currently the Environmental and Injury Epidemiology and Toxicology Unit) within the DSHS. The TD is the TCEQ program that represents TCEQ for the institute and represents TCEQ interests on research projects.

Toxic Substances Coordinating Committee

The Toxic Substances Coordinating Committee (TSCC) was created in 1987 by SB 537 (70th Texas Legislature), Section 2(h) of the Health Risk Assessment Act. The TSCC's purpose is to coordinate communication among member agencies concerning each agency's efforts to regulate toxic substances and harmful physical agents. Participating agencies, in addition to the TCEQ and DSHS include the Parks and Wildlife Department, the Department of Agriculture, the Department of Public Safety, the General Land Commission, and the Railroad Commission. The mission of the TSCC is to protect and promote the health and environment of Texas through the prevention and control of adverse health and environmental effects related to toxic substances and harmful agents. This mission is accomplished through interagency coordination of regulation development, risk assessments, cooperative studies, information dissemination, and public education efforts. The TD is the TCEQ program that serves on the TSCC, meeting quarterly.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

Environmental Protection Agency (EPA) Region 6

EPA Region 6 has toxicologists and risk assessors who work with the TD on Federal Superfund remediation sites. The TD gets information from many EPA programs and offices to make decisions on human-health and toxicology issues. In addition, the TD gives technical advice and guidance to federal agencies on such issues.

City and County Environmental and Health Departments

The TD communicates and coordinates with local government agencies that deal with human health and toxicology. The TD gives support in interpreting data, evaluating humanhealth risks and hazards, and responding to environmental issues.

In addition, the TD has participated in research projects with various governmental organizations, either as an active participant or an adviser.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

- The TD had $191,742 in encumbrances and expenditures in FY 08.

- The TD had six contracts in FY 08.

- These TD contracts allow the TCEQ to do more in a shorter time and to offer specialized toxicological services outside of the agency that are not normally performed by the TD. These services include peer reviews of ESLs, specialized carcinogenic modeling and interpretation, physiologically based pharmacokinetic modeling and interpretation, and biomonitoring studies.

- The TD uses standard methods to ensure accountability for funding and performance including invoice checklists, route slips, contractor evaluations, and TCEQ standard operating procedures.

- The program experienced no contracting problems in FY 08.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

None

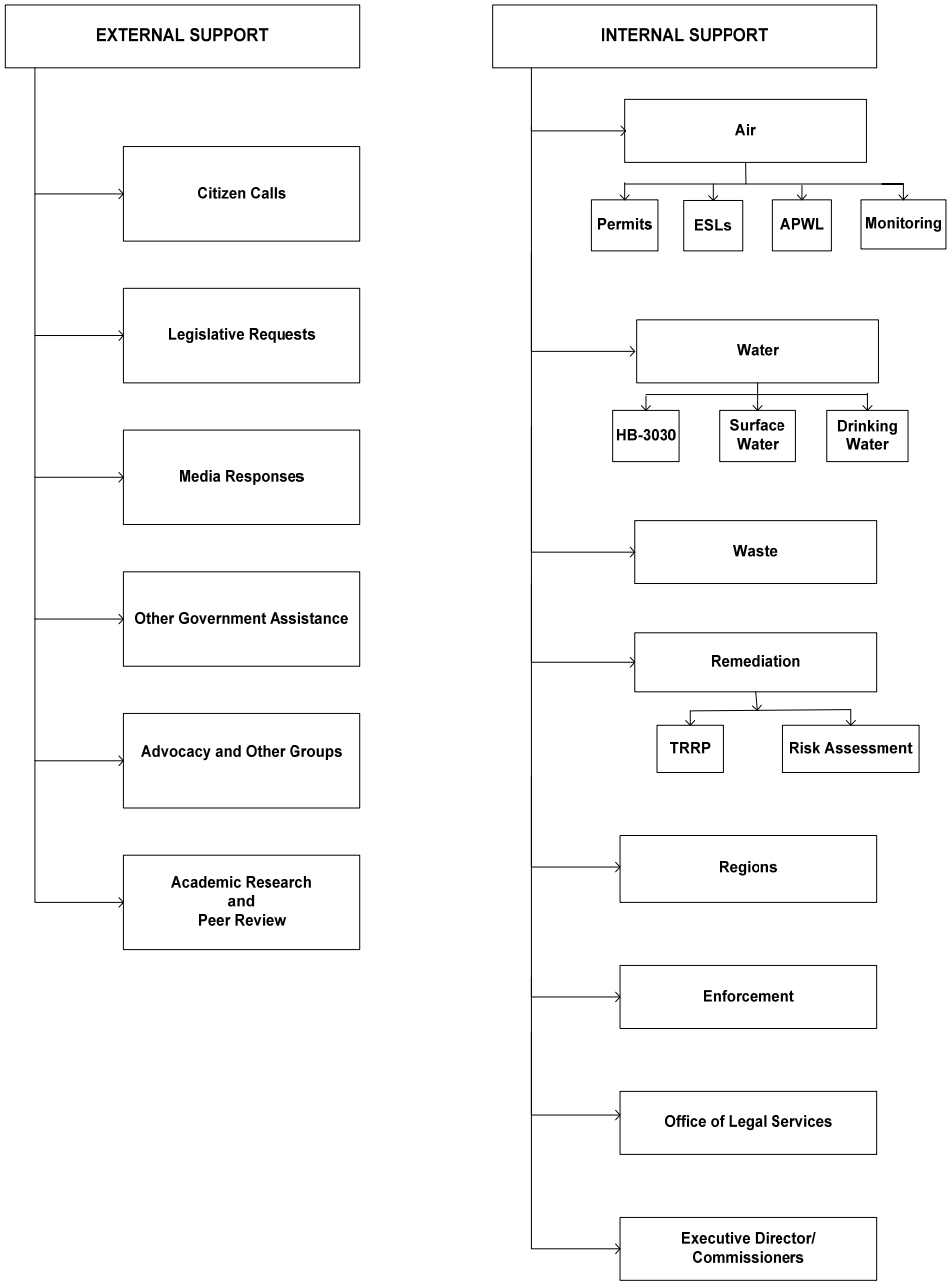
N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:
- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable

TOXICOLOGY DIVISION FUNCTIONS



VII. GUIDE TO AGENCY PROGRAMS - CONTINUED

A. Provide the following information at the beginning of each program description.

Name of Program or Function	Water Quality Planning
Location/Division	4th Floor / Building F / Monitoring and Assessment Section and the Houston Lab Section / Water Quality Planning Division / Chief Engineer's Office
Contact Name	Kelly Keel
Actual Expenditures, FY 2008	$11,552,921
Number of FTEs as of August 31, 2008	43

B. What is the objective of this program or function? Describe the major activities performed under this program.

The Water Quality Planning Division (WQPD) is responsible for developing and assessing instream water quality standards and providing quality assured surface water data for agency programs that promote the protection, restoration, and use of surface water in Texas. These functions are implemented by the following programs:

Surface Water Quality Monitoring (SWQM) Program. The SWQM Program, established in 1967 by the Texas Water Quality Board, encompasses the full range of activities required to obtain, assess, and report water quality. The SWQM, with the assistance of the Clean Rivers Program, facilitates the collection of data for an integrated evaluation of physical, chemical, and biological characteristics of aquatic ecosystems in relation to human health concerns, ecological conditions, and designated uses as defined in the Texas Water Quality Standards. The result of these activities culminates in the development and submission of the Integrated Report to the Environmental Protection Agency (EPA) on April 1 of even-numbered years as required by the Clean Water Act (CWA). The purpose of this report is to provide information on the condition of surface water quality throughout Texas. The report includes the identification of specific water bodies in need of additional remedial activities with the goal of restoring water quality. The most recent report was submitted and approved by the EPA in 2008.

Clean Rivers Program (CRP). The CRP provides water quality monitoring and assessment, and public outreach. The CRP is a collaboration of 15 partner agencies (i.e., river authorities and other governmental entities) and the TCEQ. It provides a framework and forum for managing water quality issues within a river basin, both locally and regionally, by coordinating the efforts of diverse organizations. The CRP partner agencies collect samples at over 1,300 sites per year, resulting in more than 250,000 water quality

measurements. These data from the CRP partners account for 60–70 percent of the data available in the TCEQ's Surface Water Quality Monitoring Information Systems (SWQMIS) database, used by the TCEQ for the assessment of surface waters as required by Section 305(b) of the Clean Water Act. In addition to coordination with the partner agencies, CRP staff quality-assure the data submitted and provide assistance in the study of water quality issues.

Water Quality Standards Team. The Texas Surface Water Quality Standards Team develops water quality goals for the state as set forth in 30 Texas Administrative Code (TAC), Chapter 307. Water quality standards are the basis for establishing discharge limits in wastewater and storm water discharge permits, setting instream water quality goals for Total Maximum Daily Loads (TMDLs), and providing water quality targets to assess water quality. The water quality standards are publicly revised at least every three years to incorporate new information on potential pollutants and additional data about water quality conditions in specific water bodies, and to address new state and federal regulatory requirements. The TCEQ is currently revising the Texas Surface Water Quality Standards.

Data Management and Analysis (DM&A) Team. The purpose of the DM&A Team is to ensure that agency decisions related to ambient surface water quality are based on data of known quality. The DM&A Team coordinates and assists with the data management activities of all surface water programs and external data providers, including contracted entities, the river authorities of the state, and numerous field collectors in the 16 regional TCEQ offices. The DM&A Team also manages procedures for submitting, tracking, maintaining, and reporting data; verifies and validates the data from individual programs against data quality objectives; provides guidance and training; responds to requests for data from both the public and other agency staff; and supports and maintains the statewide database of ambient surface water quality data, which receives an average of 300,000 results records per year.

Houston Laboratory. The Houston Laboratory is the agency's principal water analysis laboratory and is accredited under the National Environmental Laboratory Accreditation Program (NELAP). The laboratory provides quality-assured analytical data to support regulatory, enforcement, and monitoring activities as well as special projects.

C. What evidence can you provide that shows the effectiveness and efficiency of this program or function? Provide a summary of key statistics and performance measures that best convey the effectiveness and efficiency of this function or program.

Strategic Plan Performance Measures

LBB Outcome Measure 01-01.05. Percent of Texas surface waters meeting or exceeding water quality standards (calculated annually). This is a measure of the agency's success in developing and implementing state water quality management programs. The performance attained for this measure in 2008 was 96 percent.

LBB Output Measure 01-01-02.01. Number of surface water assessments (calculated quarterly). This includes a diverse assemblage of assessment types performed and reported by multiple divisions within the agency. The performance attained for this measure in 2008 was 97 percent.

LBB Explanatory Measure 01-01-02.01. Percent of Texas rivers, streams, wetlands, and bays protected by site-specific water quality standards (calculated annually). The Texas Surface Water Quality Standards establish explicit numerical goals for water quality in the surface waters of Texas. The performance attained for this measure in 2008 was 99 percent.

Houston Laboratory. The Houston Laboratory analyzes approximately 6,000 environmental samples annually, which translates to roughly 80,000 individual measurements reported. These are accompanied by almost as many measurements of quality control standards. The laboratory has national accreditation for 134 analytes in air, water, and waste.

D.Describe any important history regarding this program not included in the general agency history section, including how the services or functions have changed from the original intent.

On September 1, 2008, a number of agency programs responsible for water quality planning were brought together under the Water Quality Planning Division within the Chief Engineer's Office. Prior to that time, the following programs were split between the Office of Permitting and Registration and the Office of Compliance and Enforcement. These programs have closely related activities and the current organizational structure facilitates the type of coordination needed to effectively and efficiently manage these programs. In addition, this organizational structure provides one point of contact for the public regarding questions or issues related to water quality planning.

Surface Water Quality Monitoring Program (SWQM). Historically, the SWQM Program collected chemical, physical, and biological data necessary to evaluate water quality conditions throughout Texas and provided additional support to the development of water quality standards. In 2003, the TCEQ enhanced these efforts through the development of a network of continuous water quality monitoring stations. Currently, 77 stations are operated by TCEQ staff, cooperators, and contractors. Data from these stations support a variety of efforts, which include monitoring the effectiveness of pollution control measures, water quality standards development, watershed protection plans, and the TCEQ Border Initiative.

Clean Rivers Program. In 1991, the Texas Legislature passed the Texas Clean Rivers Act in response to growing concerns that water resource issues were not being addressed in a holistic manner. The legislation requires that assessments for each river basin in Texas be conducted using an approach that integrates management of water quality within a river basin or watershed.

Water Quality Standards Team. The Federal Water Pollution Control Act, Section 303 (commonly referred to as the Clean Water Act, 1972, 33 United States Code 1313(c)), requires all states to adopt water quality standards for surface water. Texas has had Texas Surface Water Quality Standards since at least 1967. Published revisions of the Texas Surface Water Quality Standards have occurred in 1967, 1973, 1976, 1981, 1984, 1988, 1991, 1993, 1995, 1997, and 2000. Diverse sources have shaped standards development, including cities, industries, environmental interests, and the EPA, which has approval authority over state water quality standards. Initially, site-specific standards were set for individual water bodies in the state relatively quickly, and in some cases there was limited data to establish uses and criteria. Many of the subsequent changes in the Texas Surface Water Quality Standards have involved revisions to the initial standards based on additional data and evaluations.

E. Describe who or what this program or function affects. List any qualifications or eligibility requirements for persons or entities affected. Provide a statistical breakdown of persons or entities affected.

Surface Water Quality Monitoring Program. The TCEQ collects environmental data to evaluate the effectiveness of specific programs—including but not limited to CWA Sections 319 (NPS control), 314 (Clean Lakes), 303(d) (TMDLs), and 402 (Texas Pollutant Discharge Elimination System [TPDES] permits, water quality standards modifications, and wastewater discharge loading allocations)—and generally to determine the success of management measures. Many users of water (e.g., recreational, municipal wastewater, public drinking water) are affected by the Integrated Report that the program submits to the EPA on April 1 of even-numbered years. The CWA Section 303(d) list affects regulated wastewater permit holders and more specifically can affect permit limits. Health and environmental-based values are used to evaluate water quality and the results regarding public water supplies and fish consumption are of interest to many citizens of the state.

Clean Rivers Program. For the CRP, stakeholders include any individual or entity that has a vested interest in a basin's waters, such as the public, non-governmental organizations, industry, government, and others.

Regionally, stakeholders have the opportunity to participate in the CRP as Steering Committee members. Each of the 15 CRP partner agencies involved in managing the CRP in their basins maintains a Steering Committee. These Steering Committee Meetings provide a framework and forum for managing water quality issues within a river basin, both locally and regionally, by coordinating the efforts of diverse organizations.

Water Quality Standards Team. The Texas Surface Water Quality Standards Team establishes explicit water quality goals throughout the state. Water quality standards are the basis for establishing discharge limits in wastewater and storm water discharge permits, setting instream water quality goals for TMDLs, and providing water quality targets to assess water quality.

The Texas Surface Water Quality Standards affect all citizens of the state. They can also directly affect permitted wastewater discharges in Texas including cities, counties, state agencies, water districts, utility districts, investor-owned utilities, river authorities, mobile home parks, recreational vehicle parks, hotels, motels, industries, campgrounds, or any other business with an industrial and domestic wastewater treatment facility.

The Water Quality Standards Team has a well-recognized statewide advisory group process, and stakeholders and the public have the opportunity to participate in the revision process. Surface Water Quality Standards Advisory Workgroup meetings are held during the revision process. This workgroup is a balanced group of representatives from regulated entities and from environmental, consumer, and professional organizations and the public.

Data Management and Analysis Team. The DM&A Team coordinates data management and data reporting activities between the SWQM Program (including the Continuous Water Quality Monitoring Network), the Clean Rivers Program, the Non-Point Source Program, the Standards Work Group, the Total Maximum Daily Load Program, the TCEQ Houston Laboratory, the Lower Colorado River Authority Environmental Laboratory, and other data providers. The DM&A Team manages data that has been collected and/or submitted by 143 entities over a period of 41 years. The data housed in the statewide database is often needed and requested by other TCEQ programs and external customers, including academia, media, advocacy groups, citizens, consultants, other state agencies, and local governmental entities. These data requests are turned around quickly, usually in less than a day.

Houston Laboratory. The Houston Laboratory is primarily a support service within the TCEQ. As such, the laboratory interacts directly with field personnel and program managers. The laboratory additionally provides measurement data for various water quality monitoring projects for external customers such as the EPA and the United States Geological Service (USGS). The laboratory regularly receives samples used for evidentiary purposes in enforcement cases, requests for expedited service, and custom report development. The Houston Laboratory is accredited under the National Environmental Laboratory Accreditation Conference (NELAC) standard; the TCEQ is required by law (30 TAC, Chapter 25) to use a NELAC accredited laboratory for environmental laboratory data used in rule making and enforcement decisions.

F. Describe how your program or function is administered. Include flowcharts, timelines, or other illustrations as necessary to describe agency policies and procedures. List any field or regional services.

On September 1, 2008, an agency reorganization brought the water quality planning programs described in this document into two separate sections within the Water Quality Planning Division of the Chief Engineer's Office. The first four programs described below are in the Monitoring and Assessment Section. The Houston Laboratory is a separate section. These programs all operate under the general auspices of a Quality Management Plan that describes organizational structures, documents and records, hardware and

software, corrective action, and water quality improvement.

Surface Water Quality Monitoring Program. Primary statutory authority for this program is provided under Section 26.127 of the Texas Water Code (TWC). The SWQM Program is significantly driven by guidance in Sections 104(b), 106, 205(j), 303(d), 305(b), 314, 319, and 604(b) of the Federal Clean Water Act (CWA) of 1987. The program follows guidelines and monitoring priorities set forth by the EPA. The EPA requires the TCEQ to develop and maintain a monitoring strategy. The Texas Surface Water Quality Monitoring and Assessment Strategy outlines how Texas will address these priorities. The SWQM activities require coordination and additional support from the TCEQ's regional offices throughout the state.

Clean Rivers Program (CRP). Primary statutory authority for this program is provided under TWC Section 26.0135. The procedures for implementing the CRP can be found in 30 TAC Chapter 220. The TCEQ CRP staff developed a guidance document that outlines the tasks necessary to meet the intent and requirements of the legislation. Each regional partner agency implements the CRP guidance based on the unique circumstances that are present in that basin. There is a minimum expectation set forth in the CRP guidance, but based on a number of factors, there is a certain amount of individuality in the focus and implementation of the program in each basin. Other tasks have been incorporated into the guidance that help provide information for other TCEQ water programs, as well. The CRP guidance is updated every two years by the staff that administers the program.

Water Quality Standards Team. The Federal Water Pollution Control Act, Section 303 (commonly referred to as the Clean Water Act, 1972, 33 United States Code, 1313(c)), requires all states to adopt water quality standards for surface water. The TWC, Section 26.023, provides the TCEQ with the authority to make rules setting Texas Surface Water Quality Standards for all waters of the state. The Federal Clean Water Act requires states to review and, if appropriate, revise the Texas Surface Water Quality Standards at least every three years. The TWC stipulates that the state may amend the standards from time to time. Amendments to the Texas Surface Water Quality Standards rule are proposed under TWC Section 5.103, which authorizes the TCEQ to adopt any rules necessary to carry out its powers and duties under the TWC and other laws of this state.

Three documents created and maintained by different TCEQ programs explain how the Texas Surface Water Quality Standards are implemented in those program areas. The procedures to implement the Texas Surface Water Quality Standards provide guidance on how Texas Surface Water Quality Standards are implemented in the Texas Pollutant Discharge Elimination System Program. The document is maintained by the TCEQ's Water Quality Division in the Office of Permitting and Registration. This document is revised in conjunction with the Texas Surface Water Quality Standards revisions. The Guidance for Assessing and Reporting Surface Water Quality in Texas explains how the Surface Water Quality Monitoring Program assesses water bodies to determine if they meet water quality standards. This guidance document is maintained and revised by the SWQM Program in the Remediation Division of the Office of Compliance and Enforcement. The Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas is maintained by

the Texas Risk Reduction Program. In addition, 30 TAC Chapter 279 contains State 401 Water Quality Certification rules.

Data Management and Analysis Team. The DM&A Team establishes guidance and manages procedures for submitting, tracking, maintaining, and reporting water quality data. These procedures are documented in the Data Management Reference Guide. This document is revised annually, or as necessary. The program staff is responsible for ensuring that agency staff understand and follow the guidance by providing training and data validation. This team also ensures continued support and maintenance of the SWQMIS.

Houston Laboratory. All processes and procedures used by the laboratory are governed by Quality Assurance Project Plans (QAPPs) as well as the laboratory's NELAC-based quality system. Environmental samples submitted to the laboratory are logged into a computerized Laboratory Information Management System (LIMS) for internal tracking, record keeping, and customer data management and administration. Each sample is subjected to a battery of tests depending upon the requested analyses, and the resulting measurement data are validated and subsequently compiled into a final report of analysis for release to the customer. Most customers receive an Electronic Data Deliverable. The laboratory's performance measures include a turnaround time goal of 28 days from sample receipt to data release.

G. Identify all funding sources and amounts for the program or function, including federal grants and pass-through monies. Describe any funding formulas or funding conventions. For state funding sources, please specify (e.g., general revenue, appropriations rider, budget strategy, fees/dues).

Account	Name	Amount
0001	General Revenue	$198,942
0153	Water Resource Management Account	$8,317,392
0550	Hazardous & Solid Waste Remediation Fee	$44,318
0555	Federal Funds	$2,911,980
0151	Clean Air Account	$80,289

Strategies
A.1.1—Air Quality Assessment and Planning
A.1.2—Water Assessment and Planning
C.1.1—Field Inspections and Complaints

H. Identify any programs, internal or external to your agency, that provide identical or similar services or functions. Describe the similarities and differences.

Surface Water Quality Monitoring Program. The SWQM Program, in cooperation with the CRP, oversees monitoring at over 1,800 sites with 59 monitoring entities to support

TCEQ water quality management decisions. The SWQM Program also develops and maintains SWQM procedures for field collection, sample handling, and analysis used by entities reporting surface water quality data to the TCEQ. The SWQM Program administers these procedures throughout the state by providing training and quality assurance oversight to agency staff and program cooperators. The cooperative effort between the TCEQ SWQM Program and the CRP prevents duplication of monitoring efforts and leverages resources to maximize dollars spent on water quality data.

The TCEQ SWQM Program, Texas Parks and Wildlife Department (TPWD), and the Department of State Health Services (DSHS) jointly administer a fish tissue analysis program based on risk analyses. The DSHS uses the information for issuing fish advisories. This same information is also incorporated into the CWA Section 303(d) List.

The TCEQ SWQM Program also works closely with the TPWD to develop biological monitoring protocols to evaluate the health of instream biological communities.

Houston Laboratory. Routine chemical tests could be performed at the DSHS and at the Lower Colorado River Authority (LCRA), or by commercial laboratories such as Accutest or Talem, Inc. Although commercial laboratory contracts provide access to specialized capabilities, operating an analytical services laboratory within the TCEQ offers several key advantages.

- Eliminates the potential conflict of interest through direct control over laboratory operations.
- Provides control over the selection of third-party suppliers.
- Ensures a level of client confidentiality.
- Maintains expertise in the testing of environmental samples.
- Makes customized services more readily available. Provides priority service without additional cost.

I. Discuss how the program or function is coordinating its activities to avoid duplication or conflict with the other programs listed in Question H and with the agency's customers. If applicable, briefly discuss any memorandums of understanding (MOUs), interagency agreements, or interagency contracts.

Surface Water Quality Monitoring Program. Every year, the entities providing surface water quality data to the TCEQ (e.g., CRP partners, TCEQ regional offices, TPWD, USGS) meet in the individual river basins to discuss their proposed monitoring plans for the following year. These meetings are a substantial effort due to both the large number of surface water quality monitoring stations where data are collected as well as the number of entities involved. The SWQM Program plans the coordinated monitoring meetings, which

are designed to minimize duplication of effort, support data sharing, outline quality assurance expectations, provide a regional water quality forum, and assist in setting priorities related to water bodies on the Section 303(d) List.

Clean Rivers Program. In an effort to help the TCEQ coordinate the statewide monitoring efforts described above, every year the CRP partners host and facilitate all the regional coordinated monitoring meetings for the TCEQ. The entities providing surface water quality data to the TCEQ (e.g., CRP partners, TCEQ regional offices, TPWD, USGS) meet to discuss their proposed monitoring plans. By providing a documented, consistent framework for collection and analysis, more comparable data of known quality are available to the state for better decision making.

Water Quality Standards Team. The Texas Surface Water Quality Standards Program and other agency programs—such as SWQM, CRP, TMDL, and Non-Point Source—meet regularly to plan and coordinate water quality studies to avoid duplication of efforts and to maximize the benefit to all agency programs. The water quality planning programs regularly notify and seek input from external stakeholders regarding their studies, not only to avoid duplication of effort, but to inform them of the TCEQ's activities and to get local information relevant to individual activities.

Houston Laboratory. The Houston Laboratory is a special support unit within the WQPD that generates measurement data on environmental samples submitted to the lab by program personnel. Laboratory capacity is designed to accommodate the most routine analyses; the TCEQ contracts some lab work with commercial or state laboratories, as appropriate, because of holding times or specialized service. For example, the TCEQ's fish tissue analyses are performed by the DSHS. Sample collection is performed according to planned schedules to ensure that no sample point is investigated more frequently or by more personnel than prescribed in the schedule. The Coordinated Monitoring Schedule is used by the SWQM Program.

J. If the program or function works with local, regional, or federal units of government include a brief description of these entities and their relationship to the agency.

Surface Water Quality Monitoring Program. To implement the statewide monitoring and assessment program, the SWQM Program staff must coordinate with TCEQ regional offices; CRP partners; and local, state, and federal monitoring agencies. Much of the funding to support these activities comes from EPA grants that support Clean Water Act monitoring and assessment activities. The TCEQ submits the Integrated Report to the EPA for approval.

Clean Rivers Program. To implement the CRP, the TCEQ contracts with 12 river authorities, a water district, one council of governments, and one federal agency. The CRP partners coordinate with the local, regional, and federal units of governments as stakeholders in that area of interest.

Water Quality Standards Team. The EPA Region 6 is responsible for the review and approval of the Texas Surface Water Quality Standards. The U.S. Fish and Wildlife Service reviews the Texas Surface Water Quality Standards and provides an opinion to the EPA with regard to federally endangered or threatened aquatic or aquatic-dependent species. The Water Quality Standards Team interacts with local, regional, and federal units of government through the Surface Water Quality Standards Advisory Workgroup and the Texas Surface Water Quality Standards revision.

Data Management and Analysis Team (DM&A). The DM&A Team works with the data providers to receive and load data to the statewide database. These data providers include various city governments, river authorities, TPWD, Texas State Soil and Water Conservation Board (TSSWCB), and the USGS.

The DM&A Team also works closely with the EPA to provide data to that agency's data warehouse using web services technology and shared data standards.

Houston Laboratory. Some sample analysis is conducted for the EPA. The Houston Laboratory maintains a Revocable License Agreement with EPA Region 6 under which sample analyses are provided in exchange for new and replacement laboratory equipment.

K. If contracted expenditures are made through this program please provide:

- **the amount of those expenditures in fiscal year 2008;**
- **the number of contracts accounting for those expenditures;**
- **a short summary of the general purpose of those contracts overall;**
- **the methods used to ensure accountability for funding and performance; and**
- **a short description of any current contracting problems.**

Water Quality Planning Division:
$6,669,148, Contracts Total
$1,092,373, Surface Water Quality Monitoring Program
$4,498,390, Clean Rivers Program
$708,613, Data Management and Analysis Team
$369,772, Water Quality Standards Team

32 Contracts:

- 13 Surface Water Quality Monitoring Program
- 15 Clean Rivers Program
- 2 Data Management and Analysis Team
- 2 Water Quality Standards Team

Contract Summaries

The Surface Water Quality Monitoring Program maintains contracts with entities such as other state agencies, river authorities, and universities to perform a variety of monitoring projects related to the goals and objectives outlined in *The Texas Surface Water Quality*

Monitoring and Assessment Strategy, including technical support and cooperation to monitor and assess water quality.

The CRP partners implement the CRP in their designated basin(s) as required by TWC Section 26.0135. The partner agencies conduct water quality monitoring under contract and approved quality assurance project plans, and provide the resulting data to the TCEQ to support water quality decision making. In addition, the partners develop water quality assessment reports and conduct public outreach activities to aid in improving water quality in their basin(s).

The DM&A Team maintains contracts for the development, support, and maintenance of the statewide database—the SWQMIS. This system enables the proper management and long-term storage of the data and supports the agency's efforts to accurately assess and report on surface water quality as required under the federal Clean Water Act.

The general purpose of the Water Quality Standards contracts is to collect information and data that can be used in the development of water quality standards.

Contract monitoring activities include: obtaining supporting documentation for planned contracts; holding post-award conferences; reviewing contract requirements; using checklists to review work products, progress reports, subcontracts, invoices, receipts, time sheets, and travel logs; assessing risk and performing on-site monitoring of work and financial records; conducting annual contractor evaluations; following up to ensure corrective actions are taken when necessary; adhering to the TCEQ Guide to Administrative Procedures; and implementing the practices of the State of Texas Contract Management Guide.

The program experienced no contracting problems in FY 08.

L. What statutory changes could be made to assist this program in performing its functions? Explain.

None

M. Provide any additional information needed to gain a preliminary understanding of the program or function.

None

N. Regulatory programs relate to the licensing, registration, certification, or permitting of a person, business, or other entity. For each regulatory program, if applicable, describe:

- **why the regulation is needed;**
- **the scope of, and procedures for, inspections or audits of regulated entities;**
- **follow-up activities conducted when non-compliance is identified;**
- **sanctions available to the agency to ensure compliance; and**
- **procedures for handling consumer/public complaints against regulated entities.**

Not Applicable

O. For each regulatory program, if applicable, provide the following complaint information. The chart headings may be changed if needed to better reflect your agency's practices.

Not Applicable