

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AGENDA ITEM REQUEST
for State Implementation Plan Revision Adoption

AGENDA REQUESTED: December 5, 2012

DATE OF REQUEST: November 16, 2012

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Joyce Spencer-Nelson, (512) 239-5017

CAPTION: Docket No. 2012-1087-SIP. Consideration of the adoption of the Federal Clean Air Act (FCAA), Section 110(a)(1) and (2) Infrastructure and Transport State Implementation Plan (SIP) Revision for the 2008 Ozone National Ambient Air Quality Standards.

The adopted SIP revision outlines the requirements of FCAA, Section 110(a)(2)(A) through (M) and the Texas provisions supporting the requirements. These requirements include basic program elements such as enforceable emission limitations and control measures, air quality monitoring and modeling, a permitting program, adequate funding, personnel, and authority under state law to carry out the plan, emissions reporting, emergency powers, public participation, and fee collection. This SIP revision also includes a technical demonstration to support that Texas meets the interstate transport requirements of FCAA, Section 110(a)(2)(D)(i)(I). (Shelley Naik, Amy Browning) (Non-Rule Project No. 2012-004-SIP-NR)

Jayne Sadlier for Steve Hagle, P.E.
Deputy Director

Kim Herndon for David Brymer
Division Director

Joyce Spencer-Nelson
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Copy to CCC Secretary? NO

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** November 16, 2012

Thru: Bridget C. Bohac, Chief Clerk
Zak Covar, Executive Director

From: Steve Hagle, P.E., Deputy Director
Office of Air

Docket No.: 2012-1087-SIP

Subject: Commission Approval for Adoption of the Federal Clean Air Act (FCAA), §110(a)(1) and (2) Infrastructure and Transport State Implementation Plan (SIP) Revision for the 2008 Ozone National Ambient Air Quality Standards (NAAQS)

Infrastructure and Transport SIP Revision for the 2008 Ozone NAAQS
Non-Rule Project No. 2012-004-SIP-NR

Background and reason(s) for the SIP revision:

On March 12, 2008, the United States Environmental Protection Agency (EPA) strengthened the NAAQS for ground level ozone. The new primary eight-hour ozone standard, set at 0.075 parts per million (ppm), replaced the previous 1997 standard of 0.08 ppm. The EPA also decreased the secondary eight-hour ozone standard to the level of 0.075 ppm making it identical to the revised primary standard. However, the EPA did not initially implement the 2008 eight-hour ozone standard due to a subsequent NAAQS reconsideration. To date, the EPA has not published infrastructure or transport guidance for the 2008 ozone NAAQS.

Section 110(a)(1) of the FCAA requires states to submit a SIP revision to provide for the implementation, maintenance, and enforcement of the NAAQS. States are required to submit the infrastructure portion of this SIP requirement to the EPA to demonstrate that basic program elements have been addressed within three years of the promulgation of any new or revised NAAQS. Section 110(a)(2) lists the elements that the new SIP submissions must contain.

On February 2, 2011, the TCEQ sent a letter to the EPA Region 6 to request formal clarification on several issues regarding the 2008 ozone NAAQS and the EPA's reconsideration of the standards. Specifically, the TCEQ asked whether the EPA intended that Texas develop and submit infrastructure and transport SIP revisions under the 2008 ozone standards by the March 12, 2011, deadline. On April 21, 2011, the EPA responded to the TCEQ stating, "As we stated earlier, EPA has not implemented the 2008 ozone standards by the deadline specified in the *Federal Register* (75 FR 2936). EPA has proposed that the 2008 ozone standards are insufficient to protect public health and welfare (75 FR 2938). EPA intends to take final action on the reconsideration by the end of July 2011 and at that time we will propose requirements for implementation, including the requisite infrastructure and transport elements." Based on this EPA direction, the TCEQ did not submit an infrastructure SIP revision by the March 12, 2011, deadline.

Re: Docket No. 2012-1087-SIP

On September 22, 2011, the EPA issued a memorandum to inform states the 2008 ozone NAAQS would be implemented. Implementation of the 2008 ozone NAAQS requires that the infrastructure SIP be submitted, although the original deadline of March 12, 2011, has already passed. On October 17, 2012, the United States District Court, Northern District of California, issued an order requiring the EPA to issue findings of failure to submit for states that had not already submitted infrastructure SIP revisions for the 2008 ozone NAAQS (including Texas) by January 4, 2013.

Submitting this SIP revision prior to a finding of failure to submit could avoid a possible federal implementation plan (FIP) by the EPA for any future transport rule associated with the 2008 ozone NAAQS. On April 25, 2005, the EPA issued Texas a finding of failure to submit the required transport SIP for the 1997 ozone standard. The EPA then relied on this notice to justify the inclusion of Texas in the FIP for the Cross-State Air Pollution Rule (CSAPR) even though Texas had subsequently submitted a transport SIP revision for the 1997 ozone standard that addressed the finding of failure to submit. On August 21, 2012, the United States Court of Appeals for the District of Columbia Circuit vacated CSAPR.

Scope of the SIP revision:

A.) Summary of what the SIP revision will do:

The SIP revision will document how the infrastructure elements listed in FCAA, §110(a)(2) are currently addressed in the Texas SIP. The SIP revision outlines the requirements of FCAA, §110(a)(2)(A) through (M) and the Texas provisions supporting the requirements. These requirements include basic program elements such as enforceable emission limitations and control measures, interstate transport provisions, air quality monitoring and modeling, a permitting program, adequate funding, personnel, and authority under state law to carry out the plan, emissions reporting, emergency powers, public participation, and fee collection.

The SIP revision will also include a technical demonstration to support that Texas meets the interstate transport requirements of §110(a)(2) of the FCAA. Pursuant to FCAA, §110(a)(2)(D)(i)(I), this SIP revision must provide supporting information demonstrating that emissions from Texas are not contributing significantly to nonattainment and not interfering with maintenance of the 2008 ozone NAAQS in any other state.

B.) Scope required by federal regulations or state statutes:

The SIP revision will document how the infrastructure elements listed in FCAA, §110(a)(2) are currently addressed in the Texas SIP. The SIP revision outlines the requirements of FCAA, §110(a)(2)(A) through (M) and the Texas provisions supporting the requirements.

C.) Additional staff recommendations that are not required by federal rule or state statute:

Re: Docket No. 2012-1087-SIP

None

Statutory authority:

The EPA published the final rule establishing the revised NAAQS for ozone in the *Federal Register* on March 27, 2008 (73 FR 16436). The authority to propose and adopt the SIP revision is derived from FCAA, 42 United States Code, §7410, which requires states to submit SIP revisions that contain enforceable measures to attain the NAAQS and other general and specific authority in Texas Water Code, Chapters 5 and 7 and Texas Health and Safety Code, Chapter 382.

Effect on the:

A.) Regulated community:

This SIP revision contains no new control measures and will not affect the regulated community.

B.) Public:

None

C.) Agency programs:

This SIP revision will have no new effect on agency programs.

Stakeholder meetings:

No stakeholder meetings were held.

Public comment:

The commission held a public hearing for the proposed SIP revision in Austin on September 25, 2012. A question and answer session was held 30 minutes prior to the meeting. The Alamo Area Council of Governments provided oral comments concerning the SIP revision.

The public comment period opened on August 24, 2012, and closed on September 28, 2012. Comments were received from the EPA, Public Citizen, and four individuals. A summary of the comments and the TCEQ response is provided as part of this SIP revision in the Response to Comments.

Significant changes from proposal:

The discussion of the Clean Air Interstate Rule (CAIR) and CSAPR was updated to include that on August 21, 2012, the United States Court of Appeals for the District of Columbia Circuit vacated CSAPR. Under the court's ruling, CAIR will remain in place until the EPA develops a valid replacement for CAIR. The background discussion was also updated to include that on October 17, 2012, the United States District Court, Northern District of California, issued an order requiring the EPA to issue findings of failure to submit infrastructure SIPs for the 2008 ozone NAAQS by January 4, 2013.

Re: Docket No. 2012-1087-SIP

In response to comment from EPA Region 6, the list of relevant rules for meeting the requirements of FCAA, §110(a)(2)(D)(i) was expanded to include 30 Texas Administrative Code, Chapters 115, 116, and 117.

In response to comment from AACOG and Public Citizen, the discussion of how Texas meets the requirements of §110(a)(2)(E), on page xii of the SIP revision narrative, was revised.

Potential controversial concerns and legislative interest:

EPA Disapproval Notices:

The EPA has published various proposed disapproval notices for Texas' air permitting programs, and these disapprovals have not yet been fully resolved. Texas has adopted new rules that address all of these notices and has committed to working closely with the EPA to ensure that these rulemaking efforts will result in rules that are approvable by the EPA. Since the EPA has not acted on the rules, the infrastructure submittal may or may not be fully approvable.

The EPA has also proposed limited approval/limited disapproval of the commission's rules regarding public participation for air quality New Source Review (NSR) permits. This proposed action has a potential direct impact on the infrastructure requirements of FCAA, §110(a)(2). Texas has withdrawn from EPA consideration most of the rules that were the subject of the proposed limited approval/limited disapproval and has submitted new and revised adopted public participation rules to the EPA for the SIP. On October 28, 2010, the EPA signed a notice withdrawing its limited approval and limited disapproval of the SIP revisions relating to public participation because those revisions are no longer before the EPA for review. Although the EPA has disapproved various elements of Texas' air permitting programs, those concerns are being addressed with newly adopted rules and a commitment to work closely with EPA staff to issue EPA-approvable rules. Texas has a robust, SIP-approved permitting program and therefore has met the infrastructure requirements of §110(a)(2).

Previous Transport Submittals:

The TCEQ submitted an FCAA, §110(a)(2)(D)(i) SIP revision for the 1997 eight-hour ozone standard in April 2008 with receipt acknowledged by the EPA as of May 5, 2008. Because Texas was not originally included in the CAIR program for the 1997 ozone standard, the state did not rely solely on CAIR modeling in meeting this SIP obligation and identified state-level controls adopted for major point sources, along with their associated emission reductions, and other Texas SIP revisions that would address Texas' §110(a)(2)(D)(i)(I) obligations.

The revision was deemed by operation of law as of November 5, 2008, to meet minimum completeness requirements, in accordance with §110(k)(1) of the FCAA. The EPA was therefore required to take action regarding full, partial, or conditional approval or disapproval for this revision within 12 months of the completeness determination.

Re: Docket No. 2012-1087-SIP

However, the EPA relied on the 2005 notice of failure to submit to justify including Texas in the FIP in the final CSAPR. While the EPA's reliance on the 2005 notice of failure to submit is not appropriate, the EPA may use the same approach to include Texas in future interstate transport programs if a finding of failure to submit is issued for the 2008 ozone NAAQS.

In a September 22, 2011, memo regarding the implementation of the 2008 NAAQS, the EPA stated that it does not intend to penalize states for the passage of time due to the delay in implementation. On October 17, 2012, however, the United States District Court, Northern District of California, issued an order requiring the EPA to issue findings of failure to submit by January 4, 2013.

Previous Infrastructure Submittals:

Texas was issued a finding of failure to submit its infrastructure SIP revision for the 1997 eight-hour ozone NAAQS on March 27, 2008. On April 4, 2008, Texas submitted a letter and supporting documentation to address any potential infrastructure issues associated with the 1997 eight-hour ozone and fine particulate matter (PM_{2.5}) NAAQS that fulfilled its infrastructure SIP obligations. On September 14, 2010, Earthjustice sued the EPA on behalf of the Sierra Club seeking to compel promulgation of a FIP for Texas for the ozone standard and to take final approval or disapproval action on Texas' PM_{2.5} submittal.

In the December 28, 2011, *Federal Register*, the EPA determined that the Texas SIP meets the infrastructure requirements for the 1997 eight-hour ozone NAAQS and the 1997 and 2006 PM_{2.5} NAAQS at FCAA, §110(a)(2)(A), (B), (E), (F), (G), (H), (K), (L), (M), and portions of (C), (D)(ii), and (J). The EPA determined that the Texas SIP does not meet the infrastructure requirements for the 1997 eight-hour ozone NAAQS and the 1997 and 2006 PM_{2.5} NAAQS at FCAA, §110(a)(2) for portions of (C), (D)(ii), and (J) because Texas has stated it cannot issue permits for and does not intend to regulate greenhouse gas (GHG) emissions. The EPA partially approved and partially disapproved the Texas SIP revisions to address the Prevention of Significant Deterioration requirements at FCAA, §110(a)(2)(D)(i) for the 1997 eight-hour ozone NAAQS and the 1997 and 2006 PM_{2.5} NAAQS again because Texas cannot issue permits for emissions of GHG. Texas is challenging the EPA's partial disapproval of the previous infrastructure SIP revisions; however, because the basis for the EPA's partial disapproval was the lack of a GHG permitting program in Texas, the EPA will likely use the same criteria when determining if any future infrastructure SIP revisions may be approved.

Does this SIP revision affect any current policies or require development of new policies?

No

Commissioners
Page 6
November 16, 2012

Re: Docket No. 2012-1087-SIP

What are the consequences if this SIP revision does not go forward? Are there alternatives to this SIP revision?

The infrastructure and transport SIP revision is required by §110(a) of the FCAA. If a SIP revision is not submitted, the EPA may promulgate a FIP for Texas.

Agency contacts:

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Amy Browning, Staff Attorney, 239-0891

Attachment

cc: Chief Clerk, 2 copies
Executive Director's Office
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Anne Idsal
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Office of General Counsel
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REVISIONS TO THE STATE OF TEXAS AIR QUALITY
IMPLEMENTATION PLAN FEDERAL CLEAN AIR ACT, SECTION
110(a)(1) AND (2) INFRASTRUCTURE AND TRANSPORT

INFRASTRUCTURE DEMONSTRATION AND TRANSPORT PLAN
FOR OZONE



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13087
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**FEDERAL CLEAN AIR ACT, SECTION 110(a)(1) AND (2)
INFRASTRUCTURE AND TRANSPORT STATE
IMPLEMENTATION PLAN REVISION FOR THE 2008
OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS**

Project Number 2012-004-SIP-NR

Adoption
December 5, 2012

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EXECUTIVE SUMMARY

This revision to the state implementation plan (SIP) for ozone infrastructure and transport is intended to meet the infrastructure requirements of the Federal Clean Air Act (FCAA), §110(a). States are required by §110(a)(1) of the FCAA to submit SIP revisions to meet the infrastructure requirements within three years of promulgation of new or revised National Ambient Air Quality Standards (NAAQS). On March 12, 2008, the United States Environmental Protection Agency (EPA) strengthened the NAAQS for ground level ozone. The new primary eight-hour ozone standard, set at 0.075 parts per million (ppm) replaced the previous 1997 standard of 0.08 ppm. The EPA also strengthened the secondary eight-hour ozone standard to the level of 0.075 ppm making it identical to the revised primary standard. This SIP revision documents that the Texas SIP at 40 Code of Federal Regulations Part 52, Subpart SS contains all the infrastructure elements required by FCAA, §110(a)(2) for the implementation, maintenance, and enforcement of the 2008 ozone NAAQS. Because the infrastructure demonstration explains how the existing Texas statutes and rules will allow the state to meet its obligations under the FCAA, this SIP revision has been developed as an expansion of the existing Section V: *Legal Authority* section of Texas' SIP. This expanded section is unique to infrastructure SIP revisions that are submitted to meet the requirements of FCAA, §110(a)(1), and demonstrates that the state can provide for the implementation, maintenance, and enforcement of the NAAQS.

The infrastructure demonstration outlines the requirements of FCAA, §110(a)(2)(A) through (M) and the Texas statutes and rules that allow the Texas Commission on Environmental Quality to meet those requirements. The requirements include basic program elements such as enforceable emission limitations and control measures, air quality monitoring and modeling, a permitting program, adequate funding and personnel, authority under state law to carry out the plan, emissions reporting, emergency powers, public participation, and fee collection.

This SIP revision also includes a more detailed technical demonstration to meet the interstate transport requirements of FCAA, §110(a)(2)(D)(i)(I). Since this infrastructure element requires more than statutory authority, the requirement is discussed in the Section VI: *Control Strategy* portion of this SIP revision. The technical demonstration includes an analysis of ozone trends and discussion of existing ozone control strategies to demonstrate that emissions from Texas do not contribute significantly to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in another state.

SECTION V: LEGAL AUTHORITY

- A. General (Revised)
- B. Infrastructure Demonstration for Lead (No change)
 - 1. 2008 Lead National Ambient Air Quality Standard (No change)
- C. Infrastructure Demonstration for Nitrogen Dioxide (No change)
 - 1. 2010 Nitrogen Dioxide National Ambient Air Quality Standard (No change)
- D. Infrastructure Demonstration for Ozone (New)
 - 1. 2008 Ozone National Ambient Air Quality Standards (New)

SECTION V-A: LEGAL AUTHORITY

A. General

The Texas Commission on Environmental Quality (TCEQ) has the legal authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) and to control the quality of the state's air, including maintaining adequate visibility.

The first air pollution control act, known as the Clean Air Act of Texas, was passed by the Texas Legislature in 1965. In 1967, the Clean Air Act of Texas was superseded by a more comprehensive statute, the Texas Clean Air Act (TCAA), found in Article 4477-5, Vernon's Texas Civil Statutes. The legislature amended the TCAA in 1969, 1971, 1973, 1979, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, and 2011. In 1989, the TCAA was codified as Chapter 382 of the Texas Health and Safety Code.

Originally, the TCAA stated that the Texas Air Control Board (TACB) is the state air pollution control agency and is the principal authority in the state on matters relating to the quality of air resources. In 1991, the legislature abolished the TACB effective September 1, 1993, and its powers, duties, responsibilities, and functions were transferred to the Texas Natural Resource Conservation Commission (TNRCC). With the creation of the TNRCC, the authority over air quality is found in both the Texas Water Code and the TCAA. Specifically, the authority of the TNRCC is found in Chapters 5 and 7. Chapter 5, Subchapters A - F, H - J, and L, include the general provisions, organization, and general powers and duties of the TNRCC, and the responsibilities and authority of the executive director. Chapter 5 also authorizes the TNRCC to implement action when emergency conditions arise and to conduct hearings. Chapter 7 gives the TNRCC enforcement authority. In 2001, the 77th Texas Legislature continued the existence of the TNRCC until September 1, 2013, and changed the name of the TNRCC to the TCEQ. In 2009, the 81st Texas Legislature, during a special session, amended section 5.014 of the Texas Water Code, changing the expiration date of the TCEQ to September 1, 2011, unless continued in existence by the Texas Sunset Act. In 2011, the 82nd Texas Legislature continued the existence of the TCEQ until 2023.

The TCAA specifically authorizes the TCEQ to establish the level of quality to be maintained in the state's air and to control the quality of the state's air by preparing and developing a general, comprehensive plan. The TCAA, Subchapters A - D, also authorize the TCEQ to collect information to enable the commission to develop an inventory of emissions; to conduct research and investigations; to enter property and examine records; to prescribe monitoring requirements; to institute enforcement proceedings; to enter into contracts and execute instruments; to formulate rules; to issue orders taking into consideration factors bearing upon health, welfare, social and economic factors, and practicability and reasonableness; to conduct hearings; to establish air quality control regions; to encourage cooperation with citizens' groups and other agencies and political subdivisions of the state as well as with industries and the federal government; and to establish and operate a system of permits for construction or modification of facilities.

Local government authority is found in Subchapter E of the TCAA. Local governments have the same power as the TCEQ to enter property and make inspections. They also may make recommendations to the commission concerning any action of the TCEQ that affects their territorial jurisdiction, may bring enforcement actions, and may execute cooperative agreements with the TCEQ or other local governments. In addition, a city or town may enact and enforce ordinances for the control and abatement of air pollution not inconsistent with the provisions of the TCAA and the rules or orders of the commission.

Subchapters G and H of the TCAA authorize the TCEQ to establish vehicle inspection and maintenance programs in certain areas of the state, consistent with the requirements of the Federal Clean Air Act; coordinate with federal, state, and local transportation planning agencies to develop and implement transportation programs and measures necessary to attain and maintain the NAAQS; establish gasoline volatility and low emission diesel standards; and fund and authorize participating counties to implement vehicle repair assistance, retrofit, and accelerated vehicle retirement programs.

B. Applicable Law

The following statutes and rules provide necessary authority to adopt and implement the state implementation plan (SIP). The rules listed below have previously been submitted as part of the SIP.

Statutes

All sections of each subchapter are included, unless otherwise noted.

TEXAS HEALTH & SAFETY CODE, Chapter 382

September 1, 2011

TEXAS WATER CODE

September 1, 2011

Chapter 5: Texas Natural Resource Conservation Commission

Subchapter A: General Provisions

Subchapter B: Organization of the Texas Natural Resource Conservation Commission

Subchapter C: Texas Natural Resource Conservation Commission

Subchapter D: General Powers and Duties of the Commission

Subchapter E: Administrative Provisions for Commission

Subchapter F: Executive Director (except §§5.225, 5.226, 5.227, 5.2275, 5.231, 5.232, and 5.236)

Subchapter H: Delegation of Hearings

Subchapter I: Judicial Review

Subchapter J: Consolidated Permit Processing

Subchapter L: Emergency and Temporary Orders (§§5.514, 5.5145, and 5.515 only)

Subchapter M: Environmental Permitting Procedures (§5.558 only)

Chapter 7: Enforcement

Subchapter A: General Provisions (§§7.001, 7.002, 7.0025, 7.004, and 7.005 only)

Subchapter B: Corrective Action and Injunctive Relief (§7.032 only)

Subchapter C: Administrative Penalties

Subchapter D: Civil Penalties (except §7.109)

Subchapter E: Criminal Offenses and Penalties: §§7.177, 7.179-7.183

Rules

All of the following rules are found in 30 Texas Administrative Code, as of the following latest effective dates:

Chapter 7: Memoranda of Understanding, §§7.110 and 7.119

December 13, 1996 and May 2, 2002

Chapter 19: Electronic Reporting

March 15, 2007

Chapter 35: Subchapters A-C, K: Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions

July 20, 2006

Chapter 39: Public Notice, §§39.402(a)(1) - (6), (8), and (10) - (12), 39.405(f)(3) and (g), (h)(1)(A) - (4), (6), (8) - (11), (i) and (j), 39.407, 39.409, 39.411(a), (e)(1) - (4)(A)(i) and (iii), (4)(B), (5)(A) and (B), and (6) - (10), (11)(A)(i) and (iii) and (iv), (11)(B) - (F), (13) and (15), and (f)(1) - (8), (g) and (h), 39.418(a), (b)(2)(A), (b)(3), and (c), 39.419(e), 39.420 (c)(1)(A) - (D)(i)(I) and (II), (D)(ii), (c)(2), (d) - (e), and (h), and 39.601 - 39.605	June 24, 2010
Chapter 55: Requests for Reconsideration and Contested Case Hearings; Public Comment, §§55.150, 55.152(a)(1), (2), (5), and (6) and (b), 55.154(a), (b), (c)(1) - (3), and (5), and (d) - (g), and 55.156(a), (b), (c)(1), (e), and (g)	June 24, 2010
Chapter 101: General Air Quality Rules	April 19, 2012
Chapter 106: Permits by Rule, Subchapter A	May 15, 2011
Chapter 111: Control of Air Pollution from Visible Emissions and Particulate Matter	February 16, 2012
Chapter 112: Control of Air Pollution from Sulfur Compounds	July 16, 1997
Chapter 113: Standards of Performance for Hazardous Air Pollutants and for Designated Facilities and Pollutants	May 14, 2009
Chapter 114: Control of Air Pollution from Motor Vehicles	September 13, 2012
Chapter 115: Control of Air Pollution from Volatile Organic Compounds	December 29, 2011
Chapter 116: Permits for New Construction or Modification	August 16, 2012
Chapter 117: Control of Air Pollution from Nitrogen Compounds	April 19, 2012
Chapter 118: Control of Air Pollution Episodes	March 5, 2000
Chapter 122: §122.122: Potential to Emit	December 11, 2002
Chapter 122: §122.215: Minor Permit Revisions	June 3, 2001
Chapter 122: §122.216: Applications for Minor Permit Revisions	June 3, 2001
Chapter 122: §122.217: Procedures for Minor Permit Revisions	December 11, 2002
Chapter 122: §122.218: Minor Permit Revision Procedures for Permit Revisions Involving the Use of Economic Incentives, Marketable Permits, and Emissions Trading	June 3, 2001

SECTION V-D-1: INFRASTRUCTURE DEMONSTRATION FOR THE 2008 OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS

A. Background

Section 110(a)(1) of the Federal Clean Air Act (FCAA) requires states to submit a state implementation plan (SIP) revision to provide for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS). States are required to submit the infrastructure portion of this SIP requirement to the United States Environmental Protection Agency (EPA) to demonstrate that basic program elements have been addressed within three years of the promulgation of any new or revised NAAQS. Section 110(a)(2) lists the elements that these SIP submissions must contain.

On March 12, 2008, the EPA strengthened the NAAQS for ground level ozone. The 2008 primary eight-hour ozone standard, set at 0.075 parts per million (ppm) replaced the previous 1997 standard of 0.08 ppm. The EPA also strengthened the secondary eight-hour ozone standard to the level of 0.075 ppm making it identical to the revised primary standard. However, the EPA did not initially implement the 2008 eight-hour ozone standard due to a subsequent reconsideration of the NAAQS.

On February 2, 2011, the Texas Commission on Environmental Quality (TCEQ) sent a letter to the EPA Region 6 to request formal clarification on several issues regarding the 2008 ozone NAAQS and the EPA's reconsideration of the standards. Specifically, the TCEQ asked whether the EPA intended that Texas develop and submit infrastructure and transport SIP revisions under the 2008 ozone standards by the March 12, 2011, deadline. On April 21, 2011, the EPA responded to the TCEQ stating, "As we stated earlier, EPA has not implemented the 2008 ozone standards by the deadline specified in the *Federal Register* (75 FR 2936). EPA has proposed that the 2008 ozone standards are insufficient to protect public health and welfare (75 FR 2938). EPA intends to take final action on the reconsideration by the end of July 2011 and at that time we will propose requirements for implementation, including the requisite infrastructure and transport elements." Based on this EPA direction, the TCEQ did not submit an infrastructure SIP revision by the March 12, 2011, deadline.

On September 22, 2011, the EPA issued a memorandum to inform states that the 2008 ozone NAAQS would be implemented. Implementation of the 2008 ozone NAAQS requires that the infrastructure SIP be submitted, although the original deadline of March 12, 2011, has already passed. On September 22, 2011, the EPA issued a memorandum entitled *Implementation of the Ozone National Ambient Air Quality Standard* in which the Assistant Administrator stated that the EPA does not intend to penalize states for late submittals of infrastructure SIPs and interstate transport SIPs. On October 17, 2012, however, the United States District Court, Northern District of California, issued an order requiring the EPA to issue findings of failure to submit for states that had not already submitted infrastructure SIP revisions for the 2008 ozone NAAQS (including Texas) by January 4, 2013. To date, the EPA has not published infrastructure or transport guidance for the 2008 ozone NAAQS.

This SIP revision is intended to provide an update of the §110(a)(2) infrastructure requirements for the 2008 ozone NAAQS. This chapter outlines FCAA, §110(a)(2)(A) through (M) and includes various Texas provisions that support the conclusion that Texas meets the requirements of each section. The federally enforceable SIP for Texas is documented at 40 Code of Federal Regulations Part 52, Subpart SS.

The infrastructure demonstration is an expansion of the Legal Authority section of Texas' SIP that provides additional information about how the existing statutes and rules allow Texas to

meet the §110(a)(2) infrastructure requirements of the FCAA. Therefore, this SIP revision contains an expanded infrastructure section under the SIP Legal Authority. This infrastructure section is intended to satisfy the §110(a)(1) requirement to provide for the implementation, maintenance, and enforcement of the NAAQS. This infrastructure section will be updated as part of the infrastructure SIP revisions that Texas is required to submit as new or revised NAAQS are promulgated, but it will not otherwise be included in other Texas SIP revisions. Section A of the Legal Authority contains the basic listing of Texas' legal framework for adopting SIP revisions and will be the default Legal Authority for Texas SIP revisions that are not specifically submitted to meet the FCAA, §110(a)(1) infrastructure demonstration requirement.

The October 2, 2007, EPA *Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 1997 8-hour ozone and PM_{2.5} National Ambient Air Quality Standards*, and the September 25, 2009, *Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle (PM_{2.5}) National Ambient Air Quality Standards (NAAQS)* indicated that if a state determines that its existing SIP is adequate, the state can certify via a letter to the EPA that the existing SIP contains provisions that address the infrastructure requirements. The EPA's more recent 2011 *Guidance on Infrastructure State Implementation Plan (SIP) Elements Required Under Sections 110(a)(1) and 110(a)(2) for the 2008 Lead (Pb) National Ambient Air Quality Standards (NAAQS)* indicates that the state should provide reasonable public notice and opportunity for public hearing prior to submission to the EPA. The EPA has not yet proposed infrastructure or transport guidance for the 2008 ozone NAAQS, but in order to meet statutory deadlines for submittal of infrastructure SIPs, states do not have the option of waiting for EPA to provide additional guidance before proceeding with infrastructure and transport SIP development, review, and submittal. The TCEQ proceeded with this SIP revision to ensure that there were adequate opportunities for public notice and comment as required by state and federal statutes.

The TCEQ acknowledges that proposed changes to federal regulations may have future impacts on how the TCEQ meets the requirements of FCAA, §110(a)(2); however, this SIP revision reflects the methods and means by which Texas meets these requirements at the time of this SIP revision. Should future federal rule changes necessitate state rule changes, the TCEQ will act appropriately at that time.

B. Texas Statutory Authority

The TCEQ has the legal authority to implement, maintain, and enforce the NAAQS. Texas' legal authority has been submitted to the EPA as part of various SIP revisions that have been approved by the EPA.

The first air pollution control act, known as the Clean Air Act of Texas, was passed by the Texas Legislature in 1965. In 1967, the Clean Air Act of Texas was superseded by a more comprehensive statute, the Texas Clean Air Act (TCAA), found in Article 4477-5, Vernon's Texas Civil Statutes. The Legislature amended the TCAA in 1969, 1971, 1973, 1979, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, and 2011. In 1989, the TCAA was codified as Chapter 382 of the Texas Health and Safety Code.

Originally, the TCAA stated that the Texas Air Control Board (TACB) was the state air pollution control agency and was the principal authority in the state on matters relating to the quality of air resources. In 1991, the legislature abolished the TACB effective September 1, 1993, and its powers, duties, responsibilities, and functions were transferred to the Texas Natural Resource Conservation Commission (TNRCC). With the creation of the TNRCC, the authority over air quality is found in both the Texas Water Code and the TCAA. Specifically, the authority of the

commission is found in Texas Water Code, Chapters 5 and 7. Chapter 5, Subchapters A - F, H - J, and L, include the general provisions, organization, and general powers and duties of the commission, and the responsibilities and authority of the executive director. Chapter 5 also authorizes the commission to implement action when emergency conditions arise and to conduct hearings. Chapter 7 gives the commission enforcement authority. In 2001, the 77th Texas Legislature continued the existence of the commission until September 1, 2013, and changed the name of the TNRCC to the TCEQ. In 2009, the 81st Texas Legislature, during a special session, amended the Texas Water Code, §5.014, changing the expiration date of the TCEQ to September 1, 2011, unless continued in existence by the Texas Sunset Act. In 2011, the 82nd Texas Legislature continued the existence of the TCEQ until 2023.

The TCAA specifically authorizes the TCEQ to establish the level of quality to be maintained in the state's air and to control the quality of the state's air by preparing and developing a general, comprehensive plan. The TCAA, Subchapters A through D, also authorize the TCEQ to collect information to enable the commission to develop an inventory of emissions; conduct research and investigations; enter property and examine records; prescribe monitoring requirements; institute enforcement proceedings; enter into contracts and execute instruments; formulate rules; issue orders taking into consideration factors bearing upon health, welfare, social and economic factors, and practicability and reasonableness; conduct hearings; establish air quality control regions; encourage cooperation with citizens' groups and other agencies and political subdivisions of the state as well as with industries and the federal government; and establish and operate a system of permits for construction or modification of facilities.

Local government authority concerning air quality matters is found in Subchapter E of the TCAA. Local governments have the same power as the TCEQ to enter property and make inspections. Local governments may also make recommendations to the commission concerning any action of the TCEQ that affects their territorial jurisdiction, may bring enforcement actions, and may execute cooperative agreements with the TCEQ or other local governments. In addition, a city or town may enact and enforce ordinances for the control and abatement of air pollution not inconsistent with the provisions of the TCAA or the rules or orders of the commission.

Subchapters G and H of the TCAA authorize the TCEQ to establish vehicle inspection and maintenance programs in certain areas of the state, consistent with the requirements of the FCAA; coordinate with federal, state, and local transportation planning agencies to develop and implement transportation programs and measures necessary to attain and maintain the NAAQS; and fund and authorize participating counties to implement vehicle repair assistance, retrofit and accelerated vehicle retirement programs.

Statutory Authority

The following statutory authority allows for the establishment and operation of the TCEQ and the adoption and implementation of all §110(a)(2) requirements.

Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, except Subchapter I.

Texas Water Code:

§5.013(a)(11) & (13)	GENERAL JURISDICTION OF COMMISSION
§5.051.	COMMISSION
§5.052.	MEMBERS OF THE COMMISSION; APPOINTMENT
§5.053.	ELIGIBILITY FOR MEMBERSHIP
§5.054.	REMOVAL OF COMMISSION MEMBERS

§5.059.	CONFLICT OF INTEREST
§5.060.	LOBBYIST PROHIBITION
§5.101.	SCOPE OF SUBCHAPTER
§5.102.	GENERAL POWERS
§5.103.	RULES
§5.104.	MEMORANDA OF UNDERSTANDING
§5.105.	GENERAL POLICY
§5.106.	BUDGET APPROVAL
§5.107.	ADVISORY COMMITTEES, WORK GROUPS, AND TASK FORCES
§5.115.	PERSONS AFFECTED IN COMMISSION HEARINGS; NOTICE OF APPLICATION
§5.117.	MANDATORY ENFORCEMENT HEARING
§5.120.	CONSERVATION AND QUALITY OF ENVIRONMENT
§5.133.	ACTIONS IN MEXICO
§5.1733.	ELECTRONIC POSTING OF INFORMATION
§5.223.	ADMINISTRATIVE ORGANIZATION OF COMMISSION
§5.230.	ENFORCEMENT
§5.233.	GIFTS AND GRANTS
§5.234.	APPLICATIONS AND OTHER DOCUMENTS
§5.237.	OPERATING FUND
§5.501.	EMERGENCY AND TEMPORARY ORDER OR PERMIT; TEMPORARY SUSPENSION OR AMENDMENT OF PERMIT CONDITION
§5.502.	APPLICATION FOR EMERGENCY OR TEMPORARY ORDER
§5.514.	ORDER ISSUED UNDER AIR EMERGENCY
§5.515.	EMERGENCY ORDER BECAUSE OF CATASTROPHE
§5.701(a)	FEES
§5.702.	PAYMENT OF FEES REQUIRED WHEN DUE
§5.703.	FEE ADJUSTMENTS
§5.704.	NOTICE OF CHANGE IN PAYMENT PROCEDURE
§5.705.	NOTICE OF VIOLATION
§7.002.	ENFORCEMENT AUTHORITY
§7.032.	INJUNCTIVE RELIEF
§7.051.	ADMINISTRATIVE PENALTY
§7.052.	MAXIMUM PENALTY
§7.053.	FACTORS TO BE CONSIDERED IN DETERMINATION OF PENALTY AMOUNT
§7.061.	PAYMENT OF PENALTY; PETITION FOR REVIEW
§7.066.	REFERRAL TO ATTORNEY GENERAL
§7.067.	SUPPLEMENTAL ENVIRONMENTAL PROJECTS
§7.072.	RECOVERY OF PENALTY
§7.073.	CORRECTIVE ACTION
§7.101.	VIOLATION
§7.102.	MAXIMUM PENALTY
§7.103.	CONTINUING VIOLATIONS
§7.105.	CIVIL SUIT
§7.106.	RESOLUTION THROUGH ADMINISTRATIVE ORDER
§7.177.	VIOLATIONS OF CLEAN AIR ACT
§7.178.	FAILURE TO PAY FEES UNDER CLEAN AIR ACT
§7.179.	FALSE REPRESENTATIONS UNDER CLEAN AIR ACT
§7.180.	FAILURE TO NOTIFY UNDER CLEAN AIR ACT
§7.181.	IMPROPER USE OF MONITORING DEVICE

- §7.182. RECKLESS EMISSION OF AIR CONTAMINANT AND ENDANGERMENT
- §7.183. INTENTIONAL OR KNOWING EMISSION OF AIR CONTAMINANT AND KNOWING ENDANGERMENT
- §7.186. SEPARATE OFFENSES
- §7.187. PENALTIES
- §7.302. GROUNDS FOR REVOCATION OR SUSPENSION OF PERMIT

C. Texas Regulatory Authority

The TCEQ has promulgated rules implementing statutory authority to meet the requirements of both the FCAA and the TCAA. These rules were submitted to the EPA in various SIP revisions and have been approved in the *Federal Register* (FR) or are pending EPA review. Rules that are relevant for each FCAA, §110(a)(2) requirement are noted below.

FCAA, §110(a)(2)(A)

Federal Requirement

- (A) include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this Act;

Texas Requirement

The TCEQ has promulgated rules to implement and enforce the NAAQS and other air quality standards. These rules include programs for banking and trading of emissions, as well as permits and fees. Periodic revisions to the SIP establish timetables and schedules for improving the air quality in nonattainment areas.

The following chapters of Title 30 Texas Administrative Code (TAC) contain rules relevant for this federal requirement:

- Chap. 7 Memoranda of Understanding
- Chap. 101 General Air Quality Rules
- Chap. 106 Permits by Rule, Subchapter A, General Requirements
- Chap. 111 Control of Air Pollution from Visible Emissions and Particulate Matter
- Chap. 112 Control of Air Pollution from Sulfur Compounds
- Chap. 113 Standards of Performance for Hazardous Air Pollutants and for Designated Facilities and Pollutants
- Chap. 114 Control of Air Pollution from Motor Vehicles
- Chap. 115 Control of Air Pollution from Volatile Organic Compounds
- Chap. 116 Control of Air Pollution by Permits for New Construction or Modification
- Chap. 117 Control of Air Pollution from Nitrogen Compounds
- Chap. 118 Control of Air Pollution Episodes

FCAA, §110(a)(2)(B)

Federal Requirement

- (B) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to (i) monitor, compile, and analyze data on ambient air quality, and (ii) make such data available to the Administrator;

Texas Requirement

The TCEQ maintains a network of air quality monitors to measure air quality data that is reported to the EPA on a regular basis. Texas submits annual monitoring plans to the EPA that describe how the state has complied with monitoring requirements and explains any proposed changes.

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 101	General Air Quality Rules
Chap. 106	Permits by Rule, Subchapter A, General Requirements
Chap. 111	Control of Air Pollution from Visible Emissions and Particulate Matter
Chap. 112	Control of Air Pollution from Sulfur Compounds
Chap. 115	Control of Air Pollution from Volatile Organic Compounds
Chap. 116	Control of Air Pollution by Permits for New Construction or Modification
Chap. 117	Control of Air Pollution from Nitrogen Compounds

FCAA, §110(a)(2)(C)

Federal Requirement

- (C) include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D;

Texas Requirement

The TCEQ has established rules governing the enforcement of control measures, including attainment plans and permitting programs that regulate construction and modification of stationary sources.¹

The EPA has published various disapproval notices for Texas' air permitting programs, and these disapprovals have not yet been fully resolved. Texas has adopted new rules that address these notices and has committed to working closely with the EPA to ensure that these rulemaking efforts will result in rules that are approvable by the EPA. The EPA has also proposed limited approval/limited disapproval of the commission's rules regarding public participation for air quality New Source Review (NSR) permits. Texas has withdrawn from EPA consideration most of the rules that were the subject of the proposed limited approval/limited disapproval and has submitted new and revised adopted public participation rules to the EPA for the SIP. On October 28, 2010, the EPA signed a notice withdrawing its limited approval and limited disapproval of the SIP revisions relating to public participation, because those revisions are no longer before the EPA for review. Although the EPA has disapproved various elements of Texas' air permitting programs, those concerns are being addressed with newly adopted rules and a commitment to work closely with EPA staff to issue EPA-approvable rules. Texas has a

¹ Texas has permitting rules for Prevention of Significant Deterioration (PSD), as required by the FCAA. In May 2010, the EPA promulgated regulations for the permitting of greenhouse gases under the PSD program. Although Texas has not amended or proposed amendments to its permitting program to include greenhouse gases, Texas is meeting its obligations under the FCAA to provide for permitting of facilities that emit criteria pollutants. Greenhouse gases are not criteria pollutants, with a NAAQS that must be met, and therefore a lack of permitting requirements in Texas rules for greenhouse gas emissions does not constitute a lack in the required infrastructure elements of §110(a)(2).

robust, SIP-approved permitting program and therefore has met the infrastructure requirements of §110(a)(2).

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 35	Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions; Subchapters A, B, C, K
Chap. 39	Public Notice
Chap. 55	Requests for Reconsideration and Contested Case Hearings; Public Notice
Chap. 101	General Air Quality Rules
Chap. 106	Permits by Rule, Subchapter A, General Requirements
Chap. 112	Control of Air Pollution from Sulfur Compounds
Chap. 115	Control of Air Pollution from Volatile Organic Compounds
Chap. 116	Control of Air Pollution by Permits for New Construction or Modification
Chap. 117	Control of Air Pollution from Nitrogen Compounds

FCAA, §110(a)(2)(D)

Federal Requirement

- (D) contain adequate provisions (i) prohibiting, consistent with the provisions of this title, any source or other type of emissions activity from emitting any air pollutant in amounts which will (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such national primary or secondary ambient air quality standard, or (II) interfere with measures required to be included in the applicable implementation plan for any other State under part C to prevent significant deterioration of air quality or to protect visibility, (ii) insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement);

Texas Requirement

This SIP revision includes an interstate transport technical analysis in Section VI: *Control Strategy* to address the requirements of §110(a)(2)(D)(i)(I).

Texas has a SIP-approved PSD and nonattainment NSR permitting program that contains requirements for sources of air pollutants to obtain an approved permit before beginning construction of a facility and before modifying an existing facility (see requirements for §110(a)(2)(C) previously listed). Texas submitted a Regional Haze SIP revision to the EPA on March 19, 2009. Regional haze program requirements include progress reports due to the EPA in 2014 and every five years thereafter, to demonstrate progress toward the visibility goal. Another Regional Haze SIP is due in 2018 and every 10 years thereafter, through 2064.

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 101	General Air Quality Rules
Chap. 122	Subchapter E, Division 2, Clean Air Interstate Rule
Chap. 115	Control of Air Pollution from Volatile Organic Compounds
Chap. 116	Control of Air Pollution by Permits for New Construction or Modification
Chap. 117	Control of Air Pollution from Nitrogen Compounds

FCAA, §110(a)(2)(E)

Federal Requirement

- (E) provide (i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under State (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof), (ii) requirements that the state comply with the requirements respecting State boards under section 128, and (iii) necessary assurances that, where the State has relied on a local or regional government, agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision;

Texas Requirement

The TCEQ has consistently included assurances in SIP revisions that the state has adequate personnel, funding, and authority under state law to carry out the SIP. The TCEQ has various Memoranda of Understanding and Memoranda of Agreement with other state and local agencies. Local governments have their own responsibilities and privileges regarding the protection of air quality as established by the Texas legislature.

Part of the TCEQ's role is to determine how to appropriately distribute resources. Like all agencies, the TCEQ prioritizes the allocation of resources to items that require the most attention and that does not always align with the needs and requests of local areas. The TCEQ works with local governments and other stakeholders during the SIP development process to assess all measures to be included in the SIP that will be implemented at the local level. After the SIP development process is completed, the TCEQ continues to provide support to local governments by participating in local air quality planning committees and through the general conformity and transportation conformity processes.

The TCEQ relies on the complete statutory and regulatory authority as referenced throughout this document. This statutory authority ensures that Texas can meet the requirements of this section, including the requirements of §128 of the FCAA. The TCEQ also regularly submits a legal authority with SIP revisions submitted to the EPA.

FCAA, §110(a)(2)(F)

Federal Requirement

- (F) require, as may be prescribed by the Administrator: (i) the installation, maintenance, and replacement of equipment, and implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources, (ii) periodic reports on the nature and amounts of emissions and emissions-related data from such sources, and (iii) correlation of such reports by the State agency with any emission limitations or standards established pursuant to this Act, which reports shall be available at reasonable times for public inspection;

Texas Requirement

The TCEQ requires monitoring for air pollutants as part of its NSR permit program. Certain emission sources are required to submit annual emission inventories and periodic reporting of emissions, which provides data that is used in air quality modeling to help Texas prepare SIP

revisions. Emissions data are available at reasonable times for public inspection, with some information also available on the agency Web site.

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 101	General Air Quality Rules
Chap. 106	Permits by Rule, Subchapter A, General Requirements
Chap. 111	Control of Air Pollution from Visible Emissions and Particulate Matter
Chap. 112	Control of Air Pollution from Sulfur Compounds
Chap. 115	Control of Air Pollution from Volatile Organic Compounds
Chap. 116	Control of Air Pollution by Permits for New Construction or Modification
Chap. 117	Control of Air Pollution from Nitrogen Compounds

FCAA, §110(a)(2)(G)

Federal Requirement

- (G) provide for authority comparable to that in section 303 and adequate contingency plans to implement such authority;

Texas Requirement

The TCEQ may issue emergency orders, or issue or suspend air permits as required by an air pollution emergency. In addition, the TCEQ also maintains air quality information in a form readily available to the public on the TCEQ's [Today's Texas Air Quality Forecast Web site](http://www.tceq.texas.gov/airquality/monops.html) (<http://www.tceq.texas.gov/airquality/monops.html>).

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 35	Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions; Subchapters A, B, C, K
Chap. 118	Control of Air Pollution Episodes

FCAA, §110(a)(2)(H)

Federal Requirement

- (H) provide for revision of such plan: (i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or more expeditious methods of attaining such standard, and (ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this Act;

Texas Requirement

The TCEQ regularly revises the Texas SIP in response to revisions in the NAAQS and the EPA rules. See §110(a)(2)(A) above.

FCAA, §110(a)(2)(I)

Federal Requirement

- (I) in the case of a plan or plan revision for an area designated as a nonattainment area, meet the applicable requirements of part D (relating to nonattainment areas);

Texas Requirement

SIP revisions that implement the control strategies necessary to bring a nonattainment area into attainment of the NAAQS are not required by the FCAA to be submitted within three years of the promulgation of a new or revised NAAQS. Therefore, §110(a)(1) does not require this element to be demonstrated as part of an infrastructure SIP submittal (73 FR 16205, at 16206).

FCAA, §110(a)(2)(J)

Federal Requirement

- (J) meet the applicable requirements of section 121 (relating to consultation), section 127 (relating to public notification), and part C (relating to prevention of significant deterioration and visibility protection);

Texas Requirement

The TCEQ has an established public participation process for all SIP revisions and permitting programs. The EPA has proposed limited approval/limited disapproval of the rules regarding public participation for air quality NSR permits.² Texas has withdrawn from EPA consideration most of the rules that were the subject of the proposed limited approval/limited disapproval, and has submitted new and revised public participation rules to the EPA as a new SIP revision to address the EPA's published concerns regarding these requirements.³ On October 28, 2010, the EPA signed a notice withdrawing its limited approval/limited disapproval of the SIP revisions relating to public participation because those revisions are no longer before the EPA for review (75 FR 68291). The TCEQ consults with other state agencies, local agencies, and non-governmental organizations, as well as with the environmental agencies of other states regarding air quality concerns. All major sources in attainment/unclassifiable areas in Texas are subject to Texas' SIP-approved PSD program. Texas submitted a SIP revision to address Regional Haze, including a long-term strategy to address visibility impairment for each Class I area that may be impacted by emissions from Texas facilities.

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 7	Memoranda of Understanding
Chap. 35	Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions; Subchapters H and K
Chap. 101	General Air Quality Rules
Chap. 116	Control of Air Pollution for New Construction or Modification

FCAA, §110(a)(2)(K)

Federal Requirement

- (K) provide for (i) the performance of such air quality modeling as the Administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any air pollutant for which the Administrator has established a national ambient air quality standard, and (ii) the submission, upon request, of data related to such air quality modeling to the Administrator;

² Approval and Promulgation of Implementation Plans; Texas; Revisions to Chapters 39, 55, and 116 Which Relate to Public Participation on Permits for New and Modified Sources, 73 FR 72001 (November 26, 2008).

³ The TCEQ adopted this rulemaking on June 2, 2010, and the adopted rules were published in the *Texas Register* (TR) on June 18, 2010 (35 TR 5198). These rules became effective on June 24, 2010, were submitted to the EPA on July 2, 2010, but the EPA has not yet taken any action on these rules.

Texas Requirement

Air quality modeling is conducted during development of revisions to the Texas SIP, as appropriate for the state to demonstrate attainment with required NAAQS. Modeling is also a part of the NSR permitting program.

The following chapter of 30 TAC contains rules relevant for this federal requirement:

Chap. 116 Control of Air Pollution for New Construction or Modification

FCAA, §110(a)(2)(L)

Federal Requirement

- (L) require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this Act, a fee sufficient to cover (i) the reasonable costs of reviewing and acting upon any application for such a permit, and (ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under title V;

Texas Requirement

The TCEQ assesses fees for reviewing permit applications and for enforcing the terms and conditions of permits.

The following chapters of 30 TAC contain rules relevant for this federal requirement:

Chap. 12 Payment of Fees
Chap. 101 General Air Quality Rules
Chap. 106 Permits by Rule, Subchapter A, General Requirements
Chap. 116 Control of Air Pollution by Permits for New Construction or Modification

FCAA, §110(a)(2)(M)

Federal Requirement

- (M) provide for consultation and participation by local political subdivisions affected by the plan.

Texas Requirement

The TCEQ has several cooperative agreements and Memoranda of Understanding with various other state and local agencies and organizations. Consultation with a variety of different organizations is a regular part of the TCEQ's process of developing SIP revisions.

D. Conclusion

The foregoing demonstrates that Texas has the necessary regulatory and statutory authority to meet the infrastructure requirements of FCAA, §110(a)(1) and (2) for the 2008 ozone NAAQS.

SECTION VI: CONTROL STRATEGY

- A. Introduction (No change)
- B. Ozone (No change)
- C. Particulate Matter (No change)
- D. Carbon Monoxide (No change)
- E. Lead (No change)
- F. Oxides of Nitrogen (No change)
- G. Sulfur Dioxide (No change)
- H. Conformity with the National Ambient Air Quality Standards (No change)
- I. Site Specific (No change)
- J. Mobile Sources Strategies (No change)
- K. Clean Air Interstate Rule (No change)
- L. Transport (Revised)
- M. Regional Haze (No change)

TABLE OF CONTENTS

Executive Summary

Section V: Legal Authority

Section V-A: Legal Authority

A. General

B. Applicable Law

Section V-D-1: Infrastructure Demonstration for the 2008 Ozone National Ambient Air Quality Standards

A. Background

B. Texas Statutory Authority

C. Texas Regulatory Authority

FCAA, §110(a)(2)(A)

FCAA, §110(a)(2)(B)

FCAA, §110(a)(2)(C)

FCAA, §110(a)(2)(D)

FCAA, §110(a)(2)(E)

FCAA, §110(a)(2)(F)

FCAA, §110(a)(2)(G)

FCAA, §110(a)(2)(H)

FCAA, §110(a)(2)(I)

FCAA, §110(a)(2)(J)

FCAA, §110(a)(2)(K)

FCAA, §110(a)(2)(L)

FCAA, §110(a)(2)(M)

D. Conclusion

Section VI: Control Strategy

Table of Contents

List of Acronyms

List of Tables

List of Figures

Chapter 1: General

1.1 Background

1.2 Introduction

1.3 Health Effects

1.4 Public Hearing and Comment Information

1.5 Social and Economic Considerations

1.6 Fiscal and Manpower Resources

1.7 Coordination with Local Agencies

1.8 Organizations Responsible for Development, Implementation and Enforcement

1.9 Data Availability

Chapter 2: Required Control Strategy Elements

2.1 Background

2.2 Control Strategy Overview

2.2.1 Significant Contribution to Nonattainment and Interference with Maintenance Elements

2.2.1.1 Technical Analysis

2.2.1.2 Monitoring Sites

2.2.1.3 References

2.2.2 Emissions Reductions from EGUs

2.2.2.1 CAIR and Cross-State Air Pollution Rule (CSAPR)

2.2.2.2 Utility Electric Generation in Ozone Nonattainment Areas

2.2.2.3 Utility Electric Generation in East and Central Texas

2.2.2.4 Senate Bill 7 (76th Texas Legislature)

2.2.3 Emission Reductions from Other Sources

2.2.3.1 HGB Area MECT Program

2.2.3.2 Cement Kilns

2.2.3.3 East Texas Engines

2.2.3.4 HGB Area Highly Reactive VOC (HRVOC) Rules and HRVOC Cap and Trade (HECT) Program

2.2.4 1997 Eight-Hour Ozone SIP Revisions Adopted Since 2008

2.2.4.1 HGB 1997 Eight-Hour Ozone SIP Revisions

2.2.4.2 DFW 1997 Eight Hour Ozone SIP Revisions

2.2.4.3 BPA 1997 Eight-Hour Ozone Redesignation to Attainment and Maintenance Plan

2.2.4.4 VIC 1997 Eight-Hour Ozone Contingency Plan SIP Revision

2.2.4.5 ARR 1997 Eight-Hour Ozone Flex Plan

2.3 Control Strategy Conclusions

**Chapter 3: Future Revisions to the National Ambient Air Quality Standards (NAAQS)
Response to Comments**

LIST OF ACRONYMS

AD	attainment demonstration
AQS	Air Quality System
ARR	Austin-Round Rock
BPA	Beaumont-Port Arthur
CAIR	Clean Air Interstate Rule
CSAPR	Cross-State Air Pollution Rule
CTG	control techniques guidelines
DERC	Discrete Emission Reduction Credit
DFW	Dallas-Fort Worth
EAC	Early Action Compact
EGU	electric generating unit
EPA	United States Environmental Protection Agency
FCAA	Federal Clean Air Act
FR	<i>Federal Register</i>
g/hp-hr	grams per horsepower-hour
HECT	Highly Reactive Volatile Organic Compounds Emissions Cap and Trade
HGB	Houston-Galveston-Brazoria
hp	horsepower
HRVOC	highly reactive volatile organic compounds
hv	sunlight
lb/MMBtu	pound per million British thermal units
lb/ton of clinker	pounds of NO _x per ton of cement clinker produced
MECT	Mass Emissions Cap and Trade
MVEB	motor vehicle emissions budget
NAAQS	National Ambient Air Quality Standards
NETX	Northeast Texas
NO	nitrogen oxide
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSR	New Source Review
O ₂	oxygen
O ₃	ozone
PM _{2.5}	fine particulate matter

ppm	parts per million
PSD	Prevention of Significant Deterioration
PUCT	Public Utility Commission of Texas
RACM	reasonably available control measures
RACT	reasonably available control technology
RFP	reasonable further progress
SIP	state implementation plan
SO ₂	sulfur dioxide
TAC	Texas Administrative Code
TACB	Texas Air Control Board
TCAA	Texas Clean Air Act
TCEQ	Texas Commission on Environmental Quality (commission)
TNRCC	Texas Natural Resource Conservation Commission
tpy	tons per year
TUC	Texas Utilities Code
VIC	Victoria
VOC	volatile organic compounds

LIST OF TABLES

Table 2-1: Percent Change in Eight-Hour Ozone Design Values

Table 2-2: Areas in EPA Region 6 Designated Nonattainment for the 2008 Eight-Hour Ozone NAAQS

Table 2-3: Monitor Sites and Eight-Hour Ozone Design Values in EPA Region 6

LIST OF FIGURES

Figure 2-1: Counties Designated Nonattainment for the 2008 Eight-Hour Ozone NAAQS (EPA, 2012)

Figure 2-2: Eight-Hour Ozone Design Value Trends in Texas and Closest Nonattainment Areas

Figure 2-3: 2010 Eight-Hour Ozone Design Values at Monitors Located in Texas and Surrounding States

Figure 2-4: NO_x Emission Trend for Texas EGUs from 1995 through 2011

CHAPTER 1: GENERAL

1.1 BACKGROUND

“The History of the Texas State Implementation Plan (SIP),” a comprehensive overview of the SIP revisions submitted to the United States Environmental Protection Agency (EPA) by the State of Texas, is available on the [Introduction to the SIP Web page](http://www.tceq.texas.gov/airquality/sip/sipintro.html#History) (<http://www.tceq.texas.gov/airquality/sip/sipintro.html#History>) on the [Texas Commission on Environmental Quality's \(TCEQ\) Web site](http://www.tceq.texas.gov) (<http://www.tceq.texas.gov>).

1.2 INTRODUCTION

This SIP revision for the transport of ozone under the 2008 Ozone National Ambient Air Quality Standards (NAAQS) describes how the Texas Commission on Environmental Quality (TCEQ) will meet the requirements of §110(a)(2)(D)(i)(I) of the Federal Clean Air Act (FCAA). States are required to submit a SIP revision within three years of promulgation of new or revised NAAQS that contains adequate provisions that prohibit any source or other type of emissions activity within the state from emitting any NAAQS pollutants in amounts that will:

- contribute significantly to nonattainment of the NAAQS for areas in other states; or
- interfere with maintenance of the NAAQS by any other state.

On March 12, 2008, the EPA strengthened the NAAQS for ground level ozone. The new primary eight-hour ozone standard, set at 0.075 parts per million (ppm) replaced the previous 1997 standard of 0.08 ppm. The EPA also decreased the secondary eight-hour ozone standard to the level of 0.075 ppm making it identical to the revised primary standard. However, the EPA did not initially implement the 2008 eight-hour ozone standard due to a subsequent reconsideration of the NAAQS. To date, the EPA has not published infrastructure or transport guidance for the 2008 ozone NAAQS. On August 21, 2012, the United States Court of Appeals for the District of Columbia Circuit vacated the Cross State Air Pollution Rule (CSAPR).

Based on the control strategies already in place to reduce ozone precursor emissions in ozone nonattainment areas and an analysis of ozone trends in Texas, this SIP revision demonstrates that Texas meets the transport requirements of FCAA §110(a)(2)(D)(i)(I).

1.3 HEALTH EFFECTS

In 2008, the EPA revised the primary ozone standard to 0.075 ppm. To support the 2008 eight-hour primary ozone standard, the EPA provided information indicating that health effects can occur at levels lower than the previous standard. Exposure to relatively high levels of ambient ozone can aggravate asthma in some people. Repeated exposures to high levels of ozone can make people more susceptible to respiratory infection and lung inflammation and can aggravate preexisting respiratory diseases, such as bronchitis and emphysema.

Children are at a relatively higher risk from exposure to ozone when compared to adults, since they breathe more air per pound of body weight than adults and because children’s respiratory systems are still developing. Children also spend a considerable amount of time outdoors during summer and during the start of the school year (August through October) when high ozone levels are typically recorded. Adults most at risk to ozone exposure are people working or exercising outdoors and individuals with preexisting respiratory diseases.

1.4 PUBLIC HEARING AND COMMENT INFORMATION

The commission held a public hearing for the proposed SIP revision in Austin on September 25, 2012. A question and answer session was held 30 minutes prior to the meeting. The Alamo Area Council of Governments provided oral comments concerning the SIP revision.

The public comment period opened on August 24, 2012, and closed on September 28, 2012. Written comments were accepted via mail, fax, and through the [eComments](http://www5.tceq.texas.gov/rules/ecomments) (<http://www5.tceq.texas.gov/rules/ecomments>) system. Written comments were received from the EPA, Public Citizen, and four individuals. A summary of the comments and the TCEQ response is provided as part of this SIP revision in the Response to Comments.

An electronic version of this SIP revision can be found at the TCEQ's [Air Pollution from Ozone](http://www.tceq.texas.gov/airquality/sip/criteria-pollutants/sip-ozone) Web page (<http://www.tceq.texas.gov/airquality/sip/criteria-pollutants/sip-ozone>).

1.5 SOCIAL AND ECONOMIC CONSIDERATIONS

Because rulemaking is not a part of this SIP revision, there are no changes that would have an impact on society or the economy.

1.6 FISCAL AND MANPOWER RESOURCES

The TCEQ has determined that its fiscal and manpower resources are adequate and will not be adversely affected through the implementation of this plan.

1.7 COORDINATION WITH LOCAL AGENCIES

The TCEQ has determined that there will be no assignment to local agencies. However, pre-existing assignments to local agencies regarding various enforcement activities remain in effect and could be used if enforcement activities are delegated to the TCEQ from the EPA.

1.8 ORGANIZATIONS RESPONSIBLE FOR DEVELOPMENT, IMPLEMENTATION AND ENFORCEMENT

The TCEQ is the agency delegated authority by the Texas Legislature regarding the protection of air quality in the State of Texas. Other local government entities have limited authority regarding air quality matters in the State of Texas.

1.9 DATA AVAILABILITY

The TCEQ affirms that it will retain all data used in the preparation of this SIP revision. All supporting documents and data are publicly available via the [TCEQ SIP Web page](http://www.tceq.texas.gov/airquality/sip/) (<http://www.tceq.texas.gov/airquality/sip/>) or are available from the TCEQ upon request.

CHAPTER 2: REQUIRED CONTROL STRATEGY ELEMENTS

2.1 BACKGROUND

There are two nonattainment areas for the 2008 eight-hour ozone National Ambient Air Quality Standards (NAAQS) in Texas: the Houston-Galveston-Brazoria (HGB) marginal nonattainment area and the Dallas-Fort Worth (DFW) moderate nonattainment area. The rest of the counties in Texas are designated unclassifiable/attainment for the 2008 eight-hour ozone NAAQS.

Texas has not yet put control measures in place to address the 2008 eight-hour ozone NAAQS, as attainment demonstration (AD) state implementation plan (SIP) revisions are not due until 2015. However, Texas already has numerous control measures in place to address ozone precursor emissions under previous ozone standards. These measures have resulted in significant decreases in eight-hour ozone design values from 1990 to 2010, with much of the decreases occurring from 2000 to 2010. With implementation of the 2008 ozone standard, decreases in design values are expected to continue.

Texas is not covered under the Clean Air Interstate Rule (CAIR) for the 1997 eight-hour ozone NAAQS, but is included for the 1997 fine particulate matter (PM_{2.5}) NAAQS. In addition to the annual nitrogen oxides (NO_x) reductions from the CAIR program, in 1999 the state implemented a strategy in the eastern part of Texas to reduce NO_x emissions from electric generating units (EGU). These EGU strategies, along with other NO_x and volatile organic compounds (VOC) reducing programs from 1997 eight-hour ozone SIP revisions, Early Action Compact (EAC) SIP revisions, 1997 eight-hour ozone maintenance plans, 1997 eight-hour ozone flex plans, one-hour ozone SIP revisions, a one-hour ozone flexible attainment region SIP revision, and one-hour ozone flexible agreements are described in this chapter. The combination of these NO_x and VOC reduction programs fulfills the state's obligation to address transport for the 2008 eight-hour ozone NAAQS.

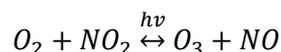
2.2 CONTROL STRATEGY OVERVIEW

Federal Clean Air Act (FCAA), §110(a)(2)(D)(i)(I) requires states to submit a SIP revision that contains adequate provisions to prohibit any source or other type of emissions activity within the state from emitting any air pollutants in amounts that will contribute significantly to nonattainment of the NAAQS for areas in other states or interfere with maintenance of the NAAQS in any other state. The following sections evaluate eight-hour ozone design value trends for nonattainment areas in Texas and in surrounding states and outline the control measures implemented in Texas to achieve emission reductions to demonstrate that emissions from Texas do not contribute significantly to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in another state.

2.2.1 Significant Contribution to Nonattainment and Interference with Maintenance Elements

2.2.1.1 Technical Analysis

Ozone (O₃) is a secondary pollutant that is created through a photochemical reaction between oxygen (O₂), NO_x, and VOC. NO_x refers to the combination of nitrogen oxide (NO) and nitrogen dioxide (NO₂). The following reactions show how NO_x, VOC, and O₂ react in the presence of sunlight (hv) to form O₃:

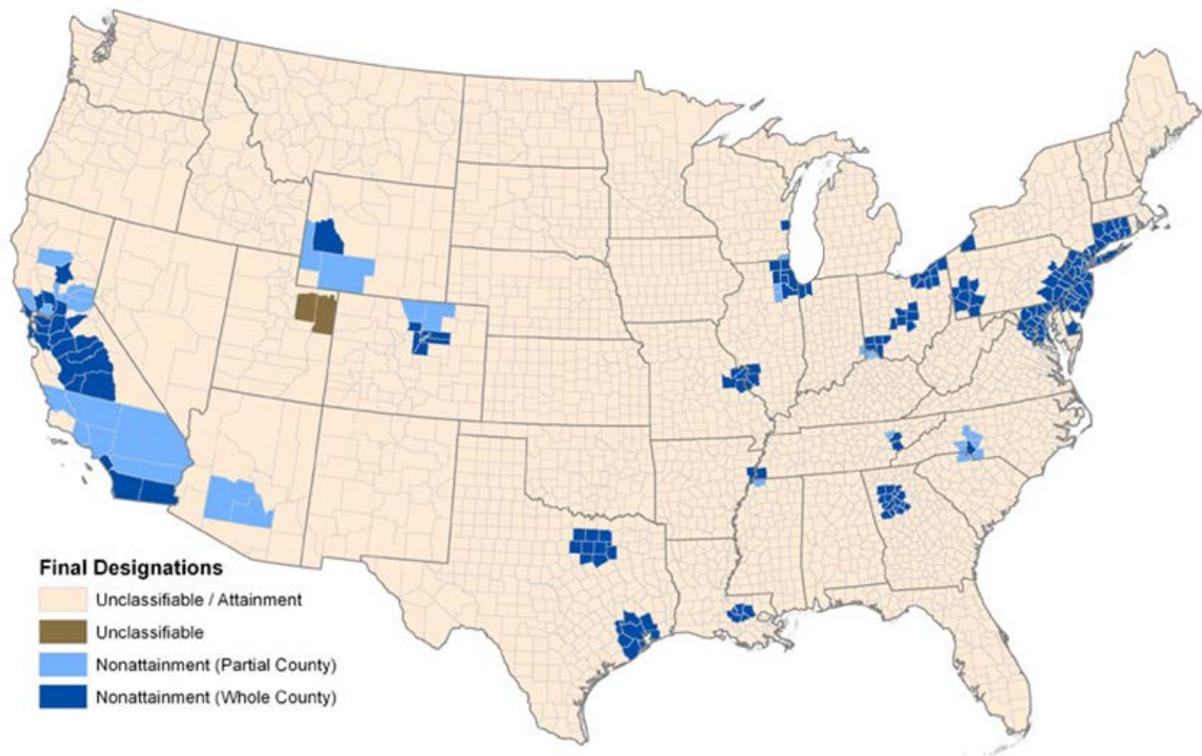




The amount of ozone formed depends on several factors. Meteorological conditions, such as wind direction and speed, temperature, mixing height, solar radiation, and other parameters, affect the rates at which ozone formation occurs. The types and the concentration of precursors present can affect net reactivity of precursor compounds found in a plume of emissions.

Precursor compounds, NO_x and VOC, also exist under natural conditions. Ozone is created and destroyed on a natural cycle according to atmospheric conditions and chemical concentrations, even in the absence of additional anthropogenic precursor sources. This natural ozone formation is known as “natural background” ozone and is the starting point for measuring the contribution of ozone and precursors attributable to human activity. Within an urban area, not all ozone formation is necessarily caused by emissions produced locally because anthropogenic precursors, along with ozone formed by them, are often transported over long distances. Because the amount of ozone formed depends on so many other variables, it can be difficult to quantify the exact contribution from specific sources.

The EPA revised the eight-hour ozone NAAQS to 0.075 parts per million (ppm) in 2008. On April 30, 2012, the EPA finalized designations for the 2008 eight-hour ozone NAAQS. Figure 2-1: *Counties Designated Nonattainment for the 2008 Eight-Hour Ozone NAAQS (EPA, 2012)* shows a map of the counties the EPA designated nonattainment. The map shows that two areas in Texas were designated nonattainment. The DFW area, which includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, and the HGB area, which includes Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.



Notes:
 EPA does not intend to designate as nonattainment any areas outside the Continental US.

Figure 2-1: Counties Designated Nonattainment for the 2008 Eight-Hour Ozone NAAQS (EPA, 2012)

Figure 2-2: *Eight-Hour Ozone Design Value Trends in Texas and Closest Nonattainment Areas* shows the eight-hour ozone design value trends from the nonattainment areas in Texas and nonattainment areas in surrounding states. The surrounding nonattainment areas evaluated below are those that are geographically closest to Texas. The design values in Texas were over 6 ppb higher in 2010 than the design values in other states; however, the overall design value trend was decreasing in all areas. Although all areas had a decrease in the eight-hour ozone design value, the majority of areas experienced most of those decreases after 2000. Table 2-1: *Percent Change in Eight-Hour Ozone Design Values* shows the percent change in the eight-hour ozone design values from Texas and the closest nonattainment areas in other states (Arizona, Arkansas, Colorado, Illinois, Indiana, Louisiana, Mississippi, Missouri, Tennessee, and Wisconsin). The minus sign indicates a percent decrease. The table shows that the percent change from 2000 through 2010, which ranged from a 9% decrease to a 25% decrease, was much larger than the percent change from 1990 through 2000, which ranged from a 6% increase to an 18% decrease. The HGB area had the second largest decrease in eight-hour ozone design values from 1990 through 2010, 29 %, the majority of that occurring after 2000.

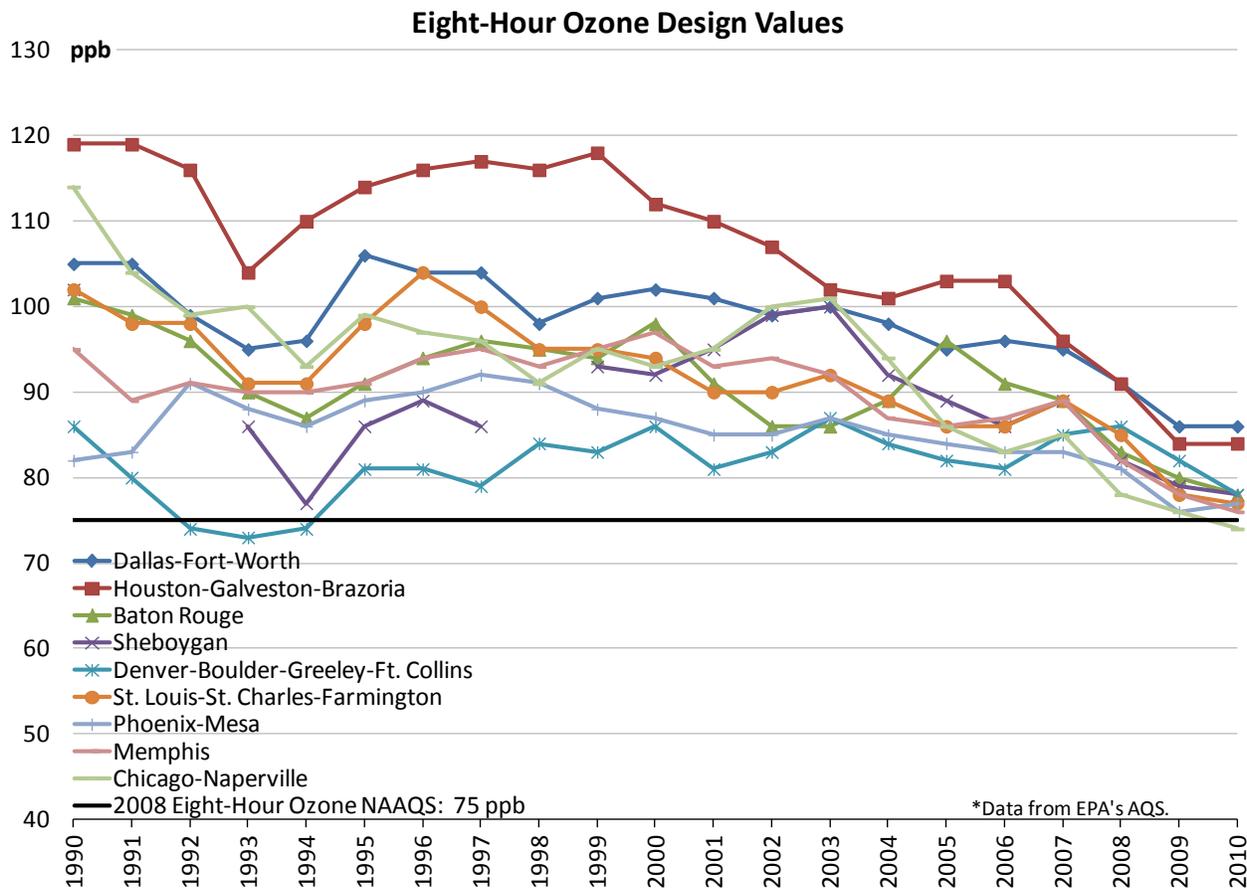


Figure 2-2: Eight-Hour Ozone Design Value Trends in Texas and Closest Nonattainment Areas

Table 2-1: Percent Change in Eight-Hour Ozone Design Values

Nonattainment Area	Percent Change 1990-2010	Percent Change 1990-2000	Percent Change 2000-2010
Chicago-Naperville	-35	-18	-20
Houston-Galveston-Brazoria	-29	-6	-25
St. Louis-St. Charles-Farmington	-25	-8	-18
Sheboygan	-24	-10	-15
Baton Rouge	-23	-3	-20
Memphis	-20	2	-22
Dallas-Fort-Worth	-18	-3	-16
Denver-Boulder-Greeley-Ft. Collins	-9	0	-9
Phoenix-Mesa	-6	6	-11

EPA Region 6, the region where Texas is located, has two other nonattainment areas besides those in Texas: the Baton Rouge area in Louisiana and the Memphis area in Arkansas, Mississippi, and Tennessee. Table 2-2: *Areas in EPA Region 6 Designated Nonattainment for the 2008 Eight-Hour Ozone NAAQS* lists the counties in each area that were designated

nonattainment and shows the approximate distance from each nonattainment area to the Texas nonattainment areas. Although the Memphis nonattainment area spans three states (Arkansas, Mississippi, and Tennessee), only one of those states, Arkansas, is located within Region 6. These areas can be seen more clearly on the map displayed in Figure 2-3: *2010 Eight-Hour Ozone Design Values at Monitors Located in Texas and Surrounding States*.

Table 2-2: Areas in EPA Region 6 Designated Nonattainment for the 2008 Eight-Hour Ozone NAAQS

Area	State	Counties Designated Nonattainment by the EPA	Approximate Distance from HGB (miles)	Approximate Distance from DFW (miles)
Baton Rouge	Louisiana	Ascension East Baton Rouge Iberville Livingston West Baton Rouge	260	370
Memphis	Arkansas Mississippi Tennessee	Crittenden DeSoto (partial county) Shelby	485	420

Figure 2-3 also shows the 2010 eight-hour ozone design values from monitors in Texas and the surrounding Region 6 states. Design values are from the EPA’s Air Quality System (AQS). The pink and red dots represent monitors with a design value that is above the 2008 eight-hour ozone NAAQS, and the yellow and blue dots represent monitors with a design value below the 2008 eight-hour ozone NAAQS. Attainment status is based on 2010 design values. Nonattainment areas are outlined on the map in light and dark brown. The map shows that there are several monitors located between Texas and the two closest nonattainment areas, Memphis and Baton Rouge. The monitors located between Texas and Baton Rouge show attainment of the 2008 eight-hour ozone NAAQS. This result suggests that local emissions contribute to these areas’ nonattainment status. In addition, there are sources of ozone precursors located between Texas and the other nonattainment areas. The amount of ozone in other nonattainment areas from precursor sources outside of Texas and the amount of ozone coming from Texas into other nonattainment areas was not calculated. Because there are additional precursor sources located between Texas and other areas, it is difficult to determine how much ozone in other areas would be due to transport and how much ozone would be due to those sources of ozone precursors.

Ozone season wind patterns from the DFW and the HGB areas were extensively investigated in the 2010 DFW Ozone Conceptual Model (TCEQ, 2011) and in the 2009 HGB Ozone Conceptual Model (TCEQ, 2010). Those analyses showed that in the DFW area ozone season winds are typically out of the south to the east. In the HGB area, winds in the early part of the ozone season, May through July, are typically from the south. Then, in the later part of the ozone season, August and September, winds switch to a more east to northeast direction. In both areas, very few winds are observed from the west and northwest, the directions which would be anticipated to transport ozone to Memphis and Baton Rouge.

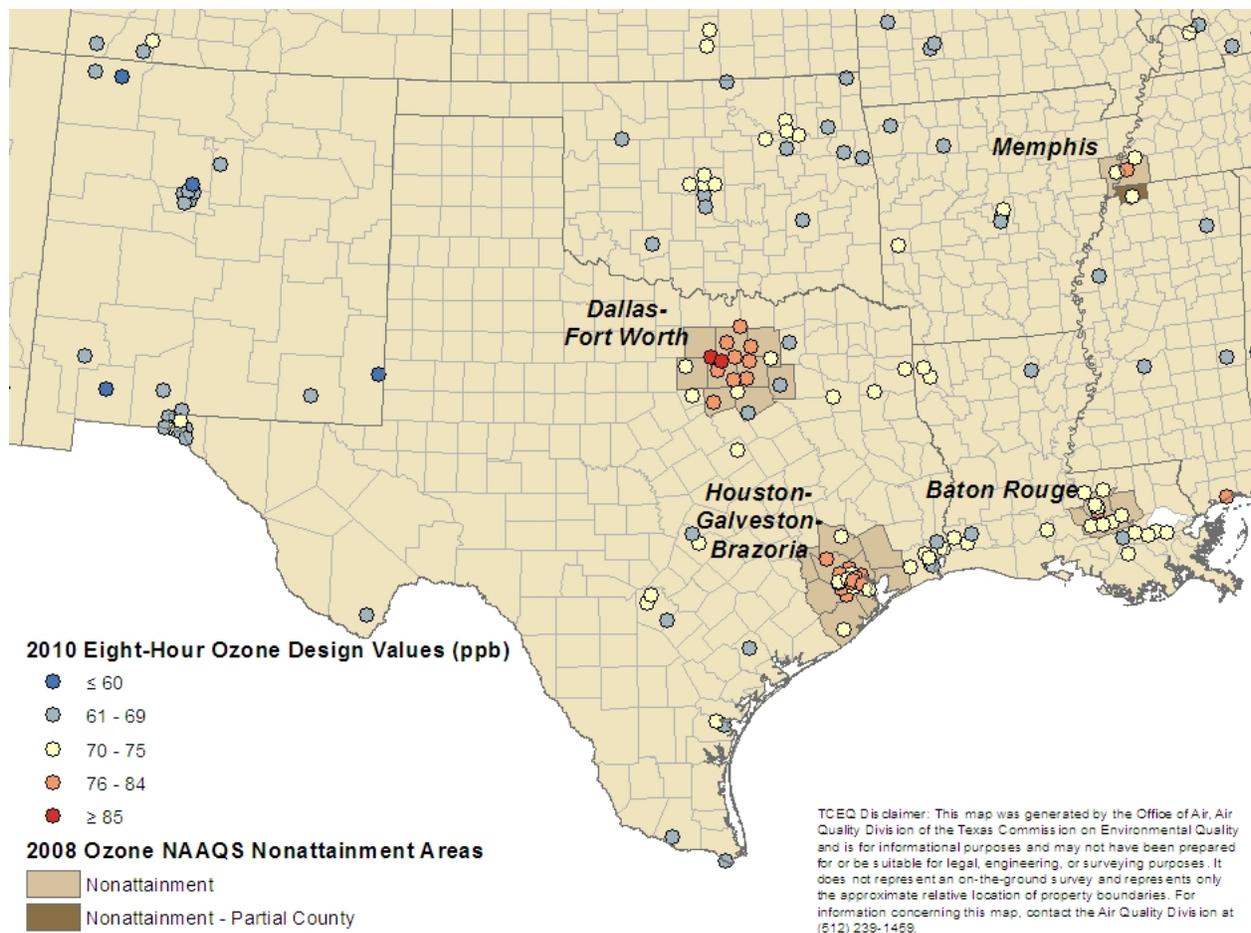


Figure 2-3: 2010 Eight-Hour Ozone Design Values at Monitors Located in Texas and Surrounding States

2.2.1.2 Monitoring Sites

In 2010, there were 167 ozone monitors located within EPA Region 6. The location of monitors with valid 2010 eight-hour ozone design values are displayed in the map in Figure 2-3. A complete list of monitors, including those without valid design values, is shown in Table 2-3: *Monitor Sites and Eight-Hour Ozone Design Values in EPA Region 6*. The data from these monitors were reported to the EPA’s AQS. Texas has the most monitors, 78, in Region 6. Oklahoma has 29 monitors, New Mexico and Louisiana have 26 monitors each, and Arkansas has 8 monitors. Note that the monitor numbers include tribal monitors. Although there are several monitors located near the Texas border in Louisiana and New Mexico, there are no monitors near the Texas border in Oklahoma and Arkansas.

Table 2-3: Monitor Sites and Eight-Hour Ozone Design Values in EPA Region 6

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
Arkansas	Crittenden	050350005-1	Marion	74	Memphis
Arkansas	Newton	051010002-1	Deer	66	
Arkansas	Polk	051130003-1	Eagle Mountain	70	

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
Arkansas	Pulaski	051190007-1	Parr	70	
Arkansas	Pulaski	051191002-1	Nlr Airport	70	
Arkansas	Pulaski	051191008-1	Doyle Springs Road	67	
Arkansas	Van Buren	051410001-1			
Arkansas	Washington	051430005-1	Springdale	64	
Louisiana	Ascension	220050004-1		75	Baton Rouge
Louisiana	Bossier	220150008-2		74	
Louisiana	Caddo	220170001-2		72	
Louisiana	Calcasieu	220190002-1		74	
Louisiana	Calcasieu	220190008-1		63	
Louisiana	Calcasieu	220190009-1		74	
Louisiana	East Baton Rouge	220330003-1		78	Baton Rouge
Louisiana	East Baton Rouge	220330009-1	Capitol	73	Baton Rouge
			Locate At Pride /		
Louisiana	East Baton Rouge	220330013-1	Zachary	72	Baton Rouge
Louisiana	East Baton Rouge	220331001-2		72	Baton Rouge
Louisiana	Iberville	220470007-1		71	
			Off LA Hwy 75 Near		
			Water Treatment		
Louisiana	Iberville	220470009-1	Facility	73	Baton Rouge
			Replaced Site Id		
Louisiana	Iberville	220470012-1	220470002	73	Baton Rouge
Louisiana	Jefferson	220511001-2	Kenner	75	
			Replace Site Id		
Louisiana	Lafayette	220550007-1	#220550001	72	
			Nicholls State University		
Louisiana	Lafourche	220570004-1	Farm	71	
Louisiana	Livingston	220630002-1		75	Baton Rouge
Louisiana	Orleans	220710012-2	City Park	71	
Louisiana	Ouachita	220730004-1	Monroe Airport	64	
Louisiana	Pointe Coupee	220770001-1		75	
Louisiana	St. Bernard	220870009-1	Chalmette High School	69	
Louisiana	St. Charles	220890003-1		70	
Louisiana	St. James	220930002-1		68	
			St. John the		
Louisiana	Baptist	220950002-1		73	
Louisiana	St. Tammany	221030002-1			
			West Baton		
Louisiana	Rouge	221210001-1		71	Baton Rouge
New Mexico	Bernalillo	350010023-1	Del Norte High School	64	
New Mexico	Bernalillo	350010024-1	South East Heights	66	

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
New Mexico	Bernalillo	350010027-1	Westside Taylor Ranch	67	
New Mexico	Bernalillo	350010029-1	South Valley Mountain View	66	
New Mexico	Bernalillo	350010032-1	Westside		
New Mexico	Bernalillo	350011012-1	Far North East Heights	68	
New Mexico	Bernalillo	350011013-1	North Valley	67	
New Mexico	Dona Ana	350130008-2		64	
New Mexico	Dona Ana	350130017-1		64	
New Mexico	Dona Ana	350130020-1	6Zk 3 Mi North Of El Paso, TX On East Side Of Franklin Mountains	66	
New Mexico	Dona Ana	350130021-1	6Zm 2Mi From Mt Cristo Rey Where NM, TX, And Mexico Join Together	70	
New Mexico	Dona Ana	350130022-1	6Zn US-Mexico Border Crossing. Both Sides Uninhabited As Of 1996.	67	
New Mexico	Dona Ana	350130023-1	6Zq In SE Corner Of NM Highway Dept. Yards In Las Cruces	63	
New Mexico	Eddy	350151005-1	5Zr On Blm Land Bordering Residential Area Outside Carlsbad City L	67	
New Mexico	Eddy	350153001-1			
New Mexico	Grant	350171003-1	7T Alongside Softball Field And Near Chino Copper Smelter	63	
New Mexico	Lea	350250008-1	Hobbs-Jefferson	59	
New Mexico	Luna	350290003-1		57	
New Mexico	Sandoval	350431001-1		60	

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
New Mexico	Sandoval	350439004-1	Pueblo Of Jemez Tribal Trust Lands, Department Of Resource Protection		
New Mexico	San Juan	350450009-1	SE Corner Of NM Highway Dept Yard	60	
New Mexico	San Juan	350450018-1			
New Mexico	San Juan	350451005-1		63	
New Mexico	San Juan	350451233-1			
New Mexico	Santa Fe	350490021-1		63	
New Mexico	Valencia	350610008-1			
Oklahoma	Adair	400019009-1	Stilwell	67	
Oklahoma	Caddo	400159008-1	Anadarko Pm2.5		
Oklahoma	Canadian	400170101-1	OKC West-(Yukon)	71	
Oklahoma	Cherokee	400219002-1	Tahlequah Shelter	68	
Oklahoma	Cleveland	400270049-1	Moore Water Tower	69	
Oklahoma	Comanche	400310649-1	Lawton South		
Oklahoma	Comanche	400310651-1	Lawton North	69	
Oklahoma	Creek	400370144-1	Mannford	70	
Oklahoma	Dewey	400430860-1	Seiling Municipal Airport Located Behind Lake Waurika Corp. Of Eng. Office	66	
Oklahoma	Jefferson	400670671-1			
Oklahoma	Kay	400719003-1	Ponca Tribe		
Oklahoma	Kay	400719010-1	Newkirk Improve Sac and Fox Nation,	66	
Oklahoma	Lincoln	400819005-1	Stroud Weather Station - Burneyville Mesonet Site	60	
Oklahoma	Love	400850300-1			
Oklahoma	McClain	400871073-1	Goldsby	68	
Oklahoma	McCurtain	400892001-1	Smithville Site		
Oklahoma	Mayes	400979014-1	Cherokee Heights	67	
Oklahoma	Oklahoma	401090033-1	OKC Central-Osdh	72	
Oklahoma	Oklahoma	401090096-1	Choctaw	72	
Oklahoma	Oklahoma	401091037-1	OKC North	74	
Oklahoma	Osage	401139020-1			
Oklahoma	Ottawa	401159004-1	Quapaw Shelter	65	

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
Oklahoma	Pittsburg	401210415-1	Mcalester Municipal Airport	67	
Oklahoma	Sequoyah	401359015-1	Marble City Shelter		
Oklahoma	Sequoyah	401359021-1			
Oklahoma	Tulsa	401430137-1	Tulsa North (Skiatook)	75	
Oklahoma	Tulsa	401430174-1	Tulsa South	67	
Oklahoma	Tulsa	401430178-1	Tulsa East	70	
Oklahoma	Tulsa	401431127-1	North Tulsa - Fire Station#24	70	
Texas	Bell	480271047-1	Killeen Skylark Field		
Texas	Bexar	480290032-2	San Antonio Northwest	75	
Texas	Bexar	480290052-1	Camp Bullis	75	
Texas	Bexar	480290055-1	CPS Pecan Valley		
Texas	Bexar	480290059-1	Calaveras Lake	67	
Texas	Bexar	480290622-1	Heritage Middle School		
Texas	Brazoria	480391004-1	Manvel Croix Park	84	HGB
Texas	Brazoria	480391016-1	Lake Jackson	74	HGB
Texas	Brewster	480430101-1	Bravo Big Bend	64	
Texas	Cameron	480610006-1	Brownsville	65	
Texas	Collin	480850005-1	Frisco	77	DFW
Texas	Dallas	481130069-3	Dallas Hinton		DFW
Texas	Dallas	481130075-1	Dallas North #2	78	DFW
Texas	Dallas	481130087-1	Dallas Redbird Airport Execut	78	DFW
Texas	Denton	481210034-1	Denton Airport South	80	DFW
Texas	Denton	481211032-1	Pilot Point	78	DFW
Texas	Ellis	481390016-1	Midlothian Ofw	72	DFW
Texas	Ellis	481391044-1	Italy	68	DFW
Texas	El Paso	481410029-1	Ivanhoe	69	
Texas	El Paso	481410037-2	El Paso UTEP	71	
Texas	El Paso	481410044-1	El Paso Chamizal	70	
Texas	El Paso	481410055-1	Ascarate Park Se	69	
Texas	El Paso	481410057-1	Socorro	68	
Texas	El Paso	481410058-1	Skyline Park	71	
Texas	Galveston	481671034-1	Galveston 99Th Street		HGB
Texas	Gregg	481830001-2	Longview	74	
Texas	Harris	482010024-2	Houston Aldine	83	HGB
Texas	Harris	482010026-3	Channelview	78	HGB
Texas	Harris	482010029-2	Northwest Harris County	81	HGB
Texas	Harris	482010046-1	Houston North Wayside	71	HGB
Texas	Harris	482010047-2	Lang	76	HGB
Texas	Harris	482010051-2	Houston Croquet	77	HGB
Texas	Harris	482010055-1	Houston Bayland Park	82	HGB

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
Texas	Harris	482010062-1	Houston Monroe	72	HGB
Texas	Harris	482010066-1	Houston Westhollow	75	HGB
Texas	Harris	482010070-1	Houston Regional Office	73	HGB
Texas	Harris	482010075-1	Houston Texas Avenue	74	HGB
Texas	Harris	482010416-1	Park Place	77	HGB
Texas	Harris	482011015-1	Lynchburg Ferry		HGB
Texas	Harris	482011034-2	Houston East	76	HGB
Texas	Harris	482011035-3	Clinton	76	HGB
Texas	Harris	482011039-1	Houston Deer Park #2	81	HGB
			Seabrook Friendship		
Texas	Harris	482011050-1	Park	75	HGB
Texas	Harrison	482030002-1	Karnack	70	
Texas	Hays	482090614-1	Dripping Springs School		
Texas	Hidalgo	482150042-1	Edinburg		
Texas	Hidalgo	482150043-1	Mission	61	
Texas	Hidalgo	482151048-1	Mercedes		
Texas	Hood	482210001-1	Granbury	75	
Texas	Hunt	482311006-1	Greenville	64	
Texas	Jefferson	482450009-2	Beaumont Downtown	72	
Texas	Jefferson	482450011-1	Port Arthur West	74	
Texas	Jefferson	482450022-1	Hamshire	70	
			South East Texas		
			Regional Planning		
			Commission (SETRPC) 40		
Texas	Jefferson	482450101-1	Sabine Pass		
			SETRPC 43 Jefferson Co		
Texas	Jefferson	482450102-1	Airport	73	
Texas	Jefferson	482450628-1	SETRPC Port Arthur	68	
Texas	Jefferson	482451035-1	Nederland High School	70	
Texas	Johnson	482510003-1	Cleburne Airport	80	DFW
Texas	Kaufman	482570005-1	Kaufman	67	DFW
Texas	McLennan	483091037-1	Waco Mazanec	70	
Texas	Montgomery	483390078-1	Conroe Relocated	71	HGB
Texas	Navarro	483491051-1	Corsicana Airport		
Texas	Nueces	483550025-2	Corpus Christi West	69	
Texas	Nueces	483550026-1	Corpus Christi Tuloso	71	
Texas	Orange	483611001-2	West Orange	71	
Texas	Orange	483611100-1	SETRPC 42 Mauriceville	68	
Texas	Parker	483670081-1	Parker County	75	DFW
Texas	Rockwall	483970001-1	Rockwall Heath	74	DFW
Texas	Smith	484230007-1	Tyler Airport Relocated	73	
Texas	Tarrant	484390075-1	Eagle Mountain Lake	85	DFW
Texas	Tarrant	484391002-2	Fort Worth Northwest	79	DFW
Texas	Tarrant	484392003-2	Keller	86	DFW

State	County Name	Airs Number and POC Number	Site Name (If Applicable)	2010 Eight-Hour Ozone Design Value	Nonattainment Area (If Applicable)
Texas	Tarrant	484393009-1	Grapevine Fairway Arlington Municipal	82	DFW
Texas	Tarrant	484393011-1	Airport	79	DFW
Texas	Travis	484530014-2	Austin Northwest	74	

2.2.1.3 References

EPA. "Final Nonattainment Areas for the 2008 Ozone Standards." Last modified May 1, 2012. <http://www.epa.gov/airquality/ozonepollution/designations/2008standards/final/finalmap.htm>.

TCEQ. HGB Attainment Demonstration SIP Revision for the 1997 Eight-Hour Ozone Standard. Appendix C: Photochemical Modeling for the HGB Attainment Demonstration SIP. March, 10, 2010. http://www.tceq.texas.gov/airquality/sip/HGB_eight_hour.html.

TCEQ. Dallas-Fort Worth Attainment Demonstration State Implementation Plan Revision for the 1997 Eight-Hour Ozone Standard. Appendix D: Conceptual Modeling for the DFW Attainment Demonstration SIP Revisions for the 1997 Eight-Hour Ozone Standard. December 7, 2011. http://www.tceq.texas.gov/airquality/sip/dfw_revisions.html.

2.2.2 Emissions Reductions from EGUs

Texas is not covered under the CAIR for the 1997 eight-hour ozone NAAQS, but is included for the 1997 PM_{2.5} NAAQS. In addition to the annual NO_x reductions from the CAIR program, in 1999, the state implemented a strategy in the eastern part of Texas to reduce NO_x emissions from EGUs. The control strategies specific to EGUs include:

- utility electric generation in ozone nonattainment areas;
- utility electric generation in east and central Texas; and
- Texas-specific legislation from the 1999 76th session in Senate Bill 7 that requires NO_x reductions through a regional cap and trade program.

These strategies have resulted in significant NO_x emissions from EGUs. Figure 2-4: *NO_x Emission Trend for Texas EGUs from 1995 through 2011* shows the NO_x emission reductions from EGUs from 1995 through 2011.

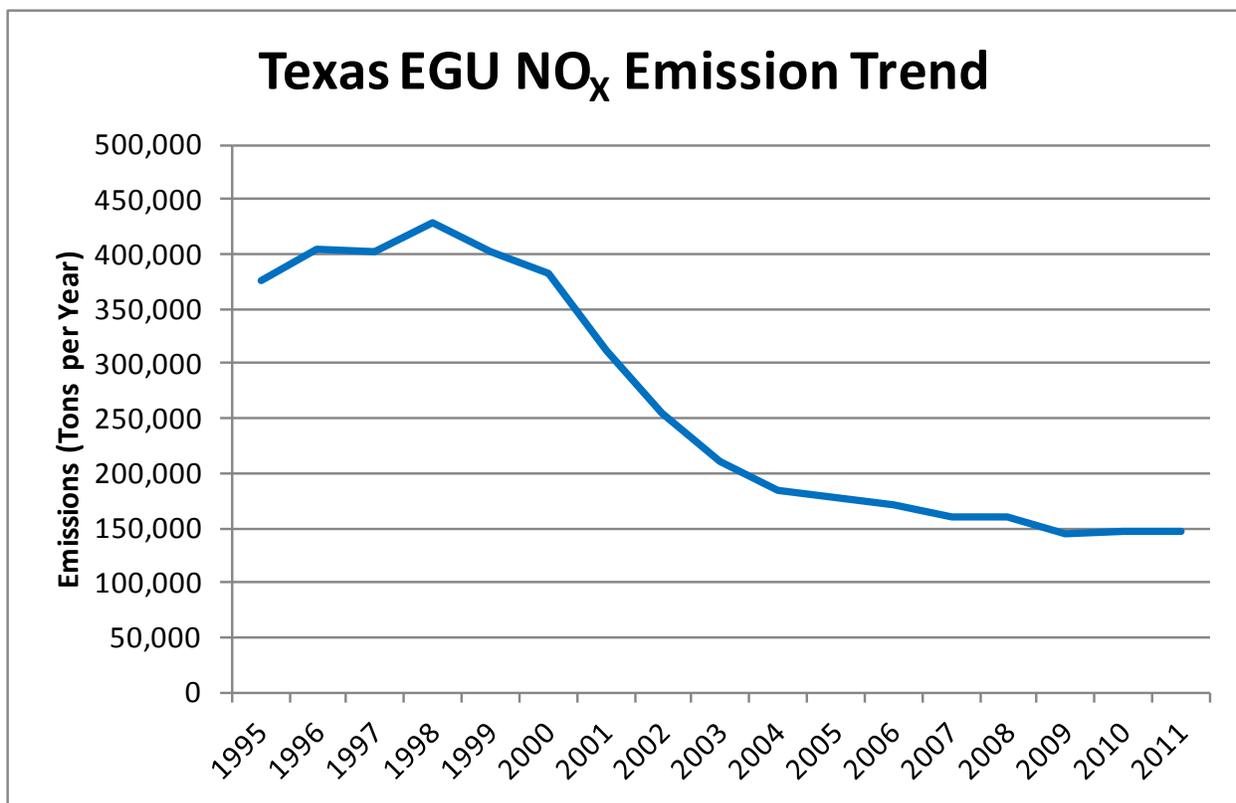


Figure 2-4: NO_x Emission Trend for Texas EGUs from 1995 through 2011

2.2.2.1 CAIR and CSAPR

In March 2005, the EPA issued CAIR to address EGU emissions that transport from one state to another. The rule incorporates the use of three cap and trade programs to reduce sulfur dioxide (SO₂) and NO_x: the ozone-season NO_x trading program, the annual NO_x trading program, and the annual SO₂ trading program.

Texas was not included in the ozone season NO_x program but was included for the annual NO_x and SO₂ programs. As such, Texas must make necessary reductions in annual SO₂ and NO_x emissions from new and existing EGUs to demonstrate that emissions from Texas do not contribute to nonattainment or interfere with maintenance of the PM_{2.5} NAAQS in another state. CAIR consists of two phases for implementing necessary NO_x and SO₂ reductions. Phase I addresses required reductions from 2009 through 2014. Phase II addresses reductions in 2015 and thereafter. In July 2006, the TCEQ adopted a SIP revision to address how the state would meet the emissions allowance allocation budgets for NO_x and SO₂ established by the EPA to meet the federal obligations under CAIR. The TCEQ adopted a second CAIR-related SIP revision in February 2010. This revision incorporated various federal rule revisions that the EPA had promulgated since the TCEQ’s initial submittal. It also incorporated revisions to 30 Texas Administrative Code (TAC), Chapter 101 resulting from legislation during the 80th Texas Legislature.

A December 2008 court decision found flaws in CAIR, but kept CAIR requirements in place temporarily while directing the EPA to issue a replacement rule. In July 2011, the EPA finalized CSAPR to meet FCAA requirements and respond to the court’s order to issue a replacement

program. Texas was included in CSAPR for ozone season NO_x, annual NO_x, and annual SO₂ due to the EPA's determination that Texas significantly contributes to nonattainment or interferes with maintenance of the 1997 eight-hour ozone NAAQS and the 1997 and 2006 PM_{2.5} NAAQS in other states.

On August 21, 2012, the United States Court of Appeals for the District of Columbia Circuit vacated CSAPR. Under the court's ruling, CAIR will remain in place until the EPA develops a valid replacement for CAIR. Therefore, all the requirements in CAIR are federally enforceable and all sources that are covered by CAIR must continue to comply with the requirements of the program.

2.2.2.2 Utility Electric Generation in Ozone Nonattainment Areas

The rules in 30 TAC Chapter 117, Subchapter C establish NO_x emission specifications for utility electric generation for each ozone nonattainment area in Texas. These rules apply to each electric generating facility that generates electric energy for compensation, or are owned or operated by a municipality or Public Utility Commission of Texas (PUCT) regulated utility or any of its successors, regardless of whether the successor is a municipality or is regulated by the PUCT.

In the HGB area, the owner or operator of each affected utility boiler, auxiliary steam boiler, or stationary gas turbine must demonstrate compliance with the NO_x emission specifications through a system cap and participation in the HGB area Mass Emissions Cap and Trade (MECT) Program. Affected sources were required to comply with the MECT Program rules beginning January 1, 2002, and comply with the system cap requirements by March 31, 2004. Additional information about the MECT Program is available in Section 2.2.3.1: *HGB Area MECT Program*.

In the DFW area, each utility boiler that is part of a large system must meet a NO_x emission rate of 0.033 pound per million British thermal units (lb/MMBtu) heat input, and each utility boiler that is part of a small system must meet a NO_x emission rate of 0.06 lb/MMBtu heat input. Compliance with the NO_x emission rates may be demonstrated on a daily average basis, a system-wide heat input weighted average basis for utility boilers that are part of a large system, or through the use of emission credits. Affected sources were required to comply with the rules by March 1, 2009.

In the Beaumont-Port Arthur (BPA) 1997 eight-hour ozone maintenance area, each utility boiler must meet a NO_x emission rate of 0.10 lb/MMBtu heat input. Compliance with the NO_x emission rates must be demonstrated on a daily average, through the use of a system cap, or through the use of emission credits. Affected sources were required to comply with the rules by May 1, 2005.

2.2.2.3 Utility Electric Generation in East and Central Texas

The rules in 30 TAC Chapter 117, Subchapter E, Division 1 limit NO_x emissions from utility electric generation in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Parker, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton Counties. The rules apply to each utility electric power boiler and stationary gas turbine (including duct burners used in turbine exhaust ducts) that generate electric energy for compensation; is owned by an electric cooperative, independent power producer, municipality, river authority, or public utility; and was placed into service before December 31, 1995. Utility electric power boilers must meet a NO_x emission rate of 0.14

lb/MMBtu for gas-fired units and 0.165 lb/MMBtu for coal-fired units. Stationary gas turbines (including duct burners used in turbine exhaust ducts) must meet an annual average NO_x emission rate of 0.14 lb/MMBtu for units subject to Texas Utilities Code (TUC), §39.264 (except §39.264(i)) or 0.15 lb/MMBtu for units not subject to TUC, §39.264 and units designated in accordance with TUC, §39.264(i). Compliance with the NO_x emission rates is based on average heat input for a calendar year. Affected sources were required to comply with the rules by May 1, 2005.

2.2.2.4 Senate Bill 7 (76th Texas Legislature)

Senate Bill 7, 76th Texas Legislature session, requires a cap and trade program for previously grandfathered or unpermitted, electric generating facilities and other electric generating facilities that choose to participate in the cap and trade program. The NO_x allowances were determined using a NO_x rate of 0.14 lb NO_x/MMBtu for grandfathered facilities in the East Texas region and a NO_x rate of 0.195 lb NO_x/MMBtu for the grandfathered facilities in the West Texas and El Paso regions.

The first control period for this program began on May 1, 2003. The last revision on this rule package, 30 TAC Chapter 101, Subchapter H, Division 2, was published in the *Texas Register* on September 10, 1999, and the public comment period ended on October 11, 1999. The adopted rule package was published in the *Texas Register* on January 7, 2000. The effective date of the rule package was January 11, 2000.

2.2.3 Emission Reductions from Other Sources

Texas has implemented numerous control measures to reduce ozone precursor emissions from a variety of sources. These measures have resulted in significant decreases in eight-hour ozone design values from 1990 through 2010. This section details some of the controls for major stationary sources and regional controls implemented as part of the state's strategy to address the one-hour and 1997 eight-hour ozone standards.

2.2.3.1 HGB Area MECT Program

The MECT Program rules in 30 TAC Chapter 101, Subchapter H, Division 3 established a mandatory annual NO_x emission cap on all existing stationary sources in the HGB area that emit at least 10 tons per year (tpy) of NO_x and are subject to the NO_x emission specifications in 30 TAC Chapter 117, Subchapter B, Division 3 and Subchapter C, Division 3. Affected units include: utility boilers, auxiliary steam boilers, or stationary gas turbines; industrial, commercial, or institutional boilers and process heaters; stationary gas turbines; stationary internal combustion engines; fluid catalytic cracking units (including carbon monoxide boilers, carbon monoxide furnaces, and catalyst regenerator vents); boilers and industrial furnaces that were regulated as existing facilities by the EPA under 40 Code of Federal Regulations Part 266, Subpart H (as in effect on June 9, 1993); duct burners used in turbine exhaust ducts; pulping liquor recovery furnaces; lime kilns; lightweight aggregate kilns; heat treating furnaces and reheat furnaces; magnesium chloride fluidized bed dryers; and incinerators.

The MECT program cap is enforced by the allocation, trading, and banking of allowances. An allowance is the equivalent of one ton of NO_x emissions. The MECT program cap was implemented on January 1, 2002, at historical emission levels, with mandatory NO_x reductions increasing over time until achieving the final cap by April 1, 2007. All new or modified sources in the HGB area must obtain unused allowances from other sources already participating in the MECT program to offset any increased NO_x emissions.

2.2.3.2 Cement Kilns

The rules in 30 TAC Chapter 117, Subchapter E, Division 1 limit NO_x emissions from cement kilns in Bexar, Comal, Hays, and McLennan Counties. The rules require cement kilns in Bexar, Comal, Hays, and McLennan Counties to reduce NO_x emissions 30% below 1996 levels or to meet a NO_x emissions cap of 6.0 pounds of NO_x per ton of cement clinker produced (lb/ton of clinker) for wet kilns; 5.1 lb/ton of clinker for dry kilns; 3.8 lb/ton of clinker for preheater kilns; and 2.8 lb/ton of clinker for preheater-precalciner or precalciner kilns. Affected sources were required to comply with the rules by May 1, 2005.

These rules also require cement kilns in Ellis County to meet a NO_x emission ozone-season cap based on kiln configuration and production during calendar years 2003 through 2005. The cap limits NO_x emissions from dry kilns to no more than 1.7 lb/ton of clinker and limits NO_x emissions from wet kilns to no more than 3.4 lb/ton of clinker. Emissions from any kilns installed after 2005 must be offset with emission reductions at the site or through emission reduction credits. Affected sources were required to comply with the rules by March 1, 2009. The Ellis County cement kiln cap is part of the May 2007 DFW AD SIP Revision and the TCEQ estimates that implementation of these rules results in approximately 9.69 tons per day NO_x emission reductions.

2.2.3.3 East Texas Engines

The rules in 30 TAC Chapter 117, Subchapter E, Division 4 limit NO_x emissions from certain engines located in Anderson, Brazos, Burleson, Camp, Cass, Cherokee, Franklin, Freestone, Gregg, Grimes, Harrison, Henderson, Hill, Hopkins, Hunt, Lee, Leon, Limestone, Madison, Marion, Morris, Nacogdoches, Navarro, Panola, Rains, Robertson, Rusk, Shelby, Smith, Titus, Upshur, Van Zandt, and Wood Counties. The rules apply to stationary, gas-fired, reciprocating internal combustion engines rated 240 horsepower (hp) and larger. Rich-burn gas-fired internal combustion engines rated less than 500 hp must limit NO_x emissions to 1.0 grams per horsepower-hour (g/hp-hr). Rich-burn engines rated 500 hp or greater must limit NO_x emissions to 0.60 g/hp-hr for landfill gas-fired engines or 0.05 g/hp-hr for all other rich-burn engines. Affected sources were required to comply with the rules by March 1, 2010.

The East Texas combustion rules reduce NO_x emissions and ozone air pollution transport into the DFW area. While these rules are part of the May 2007 DFW AD SIP Revision for the 1997 eight-hour ozone NAAQS, the Northeast Texas Early Action Compact area in east Texas also benefits from NO_x reductions resulting from the rules. Using photochemical modeling sensitivity studies, the TCEQ estimated that implementation of the rules results in an overall reduction of approximately 22.4 tons per day of NO_x emissions in the 33 counties subject to the rules by March 1, 2010. The TCEQ estimated the rules benefit the DFW area by reducing ozone by an average of 0.1 to 0.2 parts per billion.

2.2.3.4 HGB Area Highly Reactive VOC (HRVOC) Rules and HRVOC Cap and Trade (HECT) Program

The HRVOC rules in 30 TAC Chapter 115, Subchapter H are performance-based, emphasizing monitoring, recordkeeping, reporting, and enforcement rather than establishing individual unit emission rates. The rules apply to HRVOC emissions from flares, process vents, cooling towers, and fugitive emission sources. In addition to the monitoring requirements, affected sources in Harris County must meet an annual HRVOC emission cap and a site-wide short-term HRVOC limit of 1,200 lb/hour from any flare, vent, pressure relief valve, cooling tower, or any combination. Affected sources in Harris County must demonstrate compliance with these HRVOC emission limits through participation in the HECT Program.

The HECT Program rules in 30 TAC Chapter 101, Subchapter H, Division 6 establish a mandatory annual HRVOC emission cap on all existing stationary sources in Harris County that emit at least 10 tpy of HRVOC emissions and are subject to the HRVOC rules in 30 TAC Chapter 115, Subchapter H, Divisions 1 and 2. Affected sources include vent gas streams, flares, and cooling tower heat exchange systems. The HECT program cap is enforced by the allocation, trading, and banking of allowances. An allowance is the equivalent of one ton of HRVOC emissions. The HECT program cap was implemented on January 1, 2007, at historical emission levels. All new or modified sources in the HGB area must obtain unused allowances from other sources already participating in the HECT program to offset any increased HRVOC emissions.

The HECT program was revised in 2009 to reduce the total HECT cap by 25% and revise the HRVOC allocation methodology to address inequities from the initial allocation. An initial 10% reduction of the existing available cap of 3,451.5 tons will occur with the 2014 calendar-year control period. The available cap will then be reduced in 5% increments at the start of each calendar-year control period for 2015, 2016, and 2017. Photochemical modeling analysis demonstrates that a 25% reduction of the total HRVOC cap in Harris County will advance attainment of the 1997 eight-hour ozone NAAQS by reducing the future 2018 ozone design values at all HGB monitors by an average of 0.13 parts per billion.

2.2.4 1997 Eight-Hour Ozone SIP Revisions Adopted Since 2008

Texas has 1997 eight-hour ozone SIP revisions in place for the HGB area and the DFW area, as well as maintenance plans for BPA, Victoria (VIC), and El Paso. EAC SIP revisions for the 1997 eight-hour ozone standard were developed for the Austin-Round Rock (ARR) area, the Northeast Texas (NETX) area, and the San Antonio area. In addition to these SIP revisions, a 1997 Eight-Hour Ozone Flex Program is in place for ARR and Corpus Christi. One-Hour Ozone SIP revisions were developed for HGB, DFW, BPA, NETX, and the Central and East Texas Region, as well as One-Hour Ozone Flexible Agreements for Austin-San Marcos and Corpus Christi.

Texas' 1997 eight-hour ozone SIP revisions and one-hour ozone SIP revisions adopted prior to 2008 were described in detail in the previous ozone transport SIP revision to address the 1997 eight-hour ozone standard, adopted on April 16, 2008. The 1997 eight-hour ozone transport SIP revision and all other Texas SIP revisions are available on the [Texas SIP Revisions](http://www.tceq.texas.gov/airquality/sip/siplans.html) Web page (<http://www.tceq.texas.gov/airquality/sip/siplans.html>).

Since 2008, Texas has adopted several additional SIP revisions to address the 1997 eight-hour ozone standard in HGB, DFW, BPA, and VIC. An Eight-Hour Ozone Flex Plan was also developed for the ARR area. These latest SIP revisions and plans are detailed in this section.

2.2.4.1 HGB 1997 Eight-Hour Ozone SIP Revisions

On March 10, 2010, the commission adopted two revisions to the Texas SIP for the HGB severe nonattainment area. The HGB AD SIP Revision for the 1997 Eight-Hour Ozone Standard includes a photochemical modeling analysis and a weight of evidence analysis to demonstrate attainment of the 1997 eight-hour ozone NAAQS by the June 15, 2019, deadline. This SIP revision also includes a motor vehicle emissions budget (MVEB), a VOC and NO_x Reasonably Available Control Technology (RACT) analysis, a Reasonably Available Control Measures (RACM) analysis, and a contingency plan. In addition, the AD SIP revision incorporated revisions to 30 TAC Chapters 101 and 115, also adopted on March 10, 2010, which include the MECT Program Cap Integrity, the HECT Program Cap Reduction and Allowance Reallocation, and the VOC Control Techniques Guidelines (CTG) Update.

The HGB Reasonable Further Progress (RFP) SIP Revision for the 1997 Eight-Hour Ozone Standard, as required by the EPA, demonstrates that an 18% emissions reduction requirement will be met for the analysis period between 2002 through 2008 and an average of 3% per year emissions reduction between each of the milestone years 2008, 2011, 2014, 2017, and 2018. This SIP revision establishes baseline emission levels, calculates reduction targets, identifies control strategies to meet emission target levels, and tracks actual emission reductions against established emissions growth. This revision also includes an MVEB for each milestone year and a contingency plan.

On December 7, 2011, the commission adopted the HGB RACT Analysis Update SIP Revision for the 1997 Eight-Hour Ozone Standard to include CTG documents that were not addressed in the March 2010 HGB AD SIP Revision for the 1997 Eight-Hour Ozone Standard. This SIP revision also incorporated CTG-related rulemaking for the HGB area.

2.2.4.2 DFW 1997 Eight Hour Ozone SIP Revisions

On July 14, 2008, the EPA proposed conditional approval (73 FR 40203) of the May 2007 DFW AD SIP Revision, providing that final conditional approval was contingent upon Texas adopting and submitting to the EPA an approvable contingency plan SIP revision for the DFW area. The Contingency Plan SIP Revision was adopted by the commission on November 5, 2008, and submitted to the EPA on November 15, 2008. The Contingency Plan SIP revision identified measures to satisfy the EPA's 3% reduction contingency requirement for 2010 for the DFW area, to apply in the event that the DFW area failed to meet the 1997 eight-hour ozone standard by the attainment deadline. On January 14, 2009, the EPA published final conditional approval of the DFW AD SIP revision (74 FR 1903).

A condition stipulated by the EPA for final approval of the May 2007 DFW AD SIP Revision was that the TCEQ adopt and submit rule and SIP revisions to implement an enforceable mechanism to limit the use of Discrete Emissions Reduction Credits (DERC) in the DFW area by March 1, 2009. The DERC Program SIP Revision incorporated rulemaking that amends 30 TAC Chapter 101, Subchapter H, Division 4, Discrete Emission Credit Banking and Trading, to limit DERC use in the DFW area.

On March 10, 2010, the commission adopted the DFW RACT Update, 30 TAC Chapter 117 Rule Revision Noninterference Demonstration, and Modified Failure-to-Attain Contingency Plan SIP Revision. The RACT Update SIP Revision incorporated several actions adopted by the TCEQ, including 30 TAC Chapter 115 and Chapter 117 rule revisions, and supplemented the 1997 eight-hour ozone AD by demonstrating that the revised Chapter 117 rule does not interfere with the DFW AD SIP Revision.

On December 7, 2011, the commission adopted two revisions to the Texas SIP for the DFW serious nonattainment area. The DFW AD SIP revision provides photochemical modeling and weight of evidence analyses to demonstrate that the DFW nine-county serious nonattainment area will attain the 1997 eight-hour ozone standard by the June 15, 2013, attainment deadline. The AD SIP revision includes a RACT analysis, a RACM analysis, a MVEB for 2012, and a contingency plan. Concurrent with this SIP revision, the commission adopted revisions to 30 TAC Chapter 115 into the Texas SIP.

The DFW RFP SIP revision provides analyses of incremental reductions in ozone precursors, NO_x and VOC, from a 2002 base year out to attainment of the 1997 eight-hour ozone standard as well as updated emissions inventories and MVEBs for the 2011 and 2012 milestone years.

2.2.4.3 BPA 1997 Eight-Hour Ozone Redesignation to Attainment and Maintenance Plan

On December 10, 2008, the commission adopted the BPA Redesignation Request and Maintenance Plan SIP revision for the 1997 eight-hour ozone standard. On October 20, 2010, the EPA published a final rule in the *Federal Register* (75 FR 64675), effective November 19, 2010, approving the redesignation request and maintenance plan and finalizing a determination that the BPA area is in attainment of the revoked one-hour ozone standard. With redesignation to attainment for the 1997 eight-hour ozone standard and a determination of attainment for the one-hour ozone standard, no new ozone reduction strategies will have to be developed for either standard as long as the area continues to monitor ozone levels below the 1997 eight-hour ozone standard; however, current strategies to reduce ozone in the BPA area will remain in place.

2.2.4.4 VIC 1997 Eight-Hour Ozone Contingency Plan SIP Revision

In early 2009, EPA Region 6 staff informed the TCEQ that to approve the Victoria County 1997 Eight-Hour Ozone Maintenance Plan adopted in March 2007, the contingency plan had to be revised to contain an enforceable commitment to adopt and implement the contingency measures once they are triggered. On July 28, 2010, the commission adopted the Contingency Plan SIP Revision for the VIC area.

2.2.4.5 ARR 1997 Eight-Hour Ozone Flex Plan

On June 18, 2008, the commission approved the Austin-Round Rock Eight-Hour Ozone Flex Plan and Memorandum of Agreement. Stakeholders involved in this plan are Bastrop, Caldwell, Hays, Travis, and Williamson Counties; the cities of Austin, Bastrop, Elgin, Lockhart, Luling, Round Rock, and San Marcos; the TCEQ; and the EPA. The Eight-Hour Ozone Flex program is one in a series of regional initiatives and builds on the region's previous plans: the One-Hour Ozone Flex program and the EAC. These voluntary initiatives allow the region to address regional ozone problems proactively to maintain the 1997 eight-hour ozone standard.

2.3 CONTROL STRATEGY CONCLUSIONS

Overall, monitoring data do not suggest that emissions from Texas contribute significantly to nonattainment or interfere with maintenance of the 2008 eight-hour ozone NAAQS for areas in any other state. Additionally, Texas has numerous control measures in place to address ozone precursor emissions and all are federally enforceable through SIP revisions. These measures have resulted in significant decreases in eight-hour ozone design values from 1990 through 2010, with much of the decreases occurring from 2000 through 2010. With implementation of the 2008 ozone standard, decreases in design values are expected to continue.

CHAPTER 3: FUTURE REVISIONS TO THE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

Federal Clean Air Act (FCAA), §110(a)(1) requires states to submit state implementation plans within three years after the promulgation of new or revised NAAQS to meet the requirements of FCAA, §110(a)(2), including FCAA, §110(a)(2)(D)(i)(I), relating to interstate transport. Therefore, if the NAAQS are revised in the future, the Texas Commission on Environmental Quality will need to take the adequate steps relating to the interstate transport of air pollution.

RESPONSE TO COMMENTS RECEIVED REGARDING FEDERAL CLEAN AIR ACT (FCAA), SECTION 110(a)(1) AND (2) INFRASTRUCTURE AND TRANSPORT STATE IMPLEMENTATION PLAN (SIP) REVISION FOR THE 2008 OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

The Texas Commission on Environmental Quality (TCEQ) held a public hearing for the proposed SIP revision on September 25, 2012, at 10:00 a.m. at the TCEQ Headquarters in Austin. The Austin Area Council of Governments (AACOG) provided oral comments concerning the SIP revision.

The public comment period opened on August 24, 2012, and closed on September 28, 2012. The commission received written comments from the United States Environmental Protection Agency (EPA), Public Citizen, and four individuals.

TABLE OF CONTENTS

Table of Contents	1
General Comments.....	1
Power Plants.....	2
Greenhouse Gas (GHG) Permitting	2
Adequacy of Controls as Required by FCAA, §110(a)(1) and (a)(2)(A)	3
Compliance with The FCAA	4
Title 30 Texas Administrative Code (TAC) Rules for Addressing FCAA, §110(a)(2)(D)(i)(II).....	7
Funding and FCAA, §110(a)(2)(E)	8
Emissions Inventory Development.....	9
Authority of the TCEQ to Revise the Texas SIP	10
Interstate Transport and FCAA, §110(a)(2)(D)(i)(I)	11

GENERAL COMMENTS

Public Citizen commented that its experiences working to develop local clean air plans that are subsequently dismissed and replaced by the TCEQ with far weaker, inadequate plans have been disappointing.

This comment is beyond the scope of this SIP revision. The purpose of this SIP revision is to demonstrate how Texas meets the infrastructure requirements of FCAA, §110(a), including the interstate transport requirements of FCAA, §110(a)(2)(D)(i)(I), for the 2008 eight-hour ozone NAAQS. The infrastructure and transport demonstration explains how existing Texas statutes and rules will allow the state to meet its obligations under the FCAA. This SIP revision is not an attainment demonstration, but a demonstration that basic program elements have been addressed for the 2008 ozone NAAQS.

One individual mentioned the availability of clean-up systems for storm water runoff.

The issue of storm water runoff is beyond the scope of this SIP revision. This SIP revision is an air quality plan intended to meet FCAA requirements for ozone infrastructure and transport.

POWER PLANTS

Public Citizen commented that it has participated or advised 16 groups that were fighting coal plants in Texas, and that the TCEQ permitted plants with emissions large enough to affect nonattainment areas. Public Citizen commented that these plants were permitted without adequate analysis and credible outside analysts were ignored, resulting in the deterioration of, or failure to improve, air quality. Public Citizen also commented that the TCEQ rejected the EPA's request for modeling for the White Stallion plant, and although it is next to the worst nonattainment area in the state, the TCEQ did not hesitate to permit a large source near an area with ozone problems. Additionally, one individual requested a public meeting concerning the Las Brisas power plant and a contested case hearing in Corpus Christi, Texas. Another individual also requested a public meeting and contested case hearing in Corpus Christi, Texas. One individual commented that coal burning is the subject of many lawsuits and they disagree that burning coal for power is safe.

These comments are beyond the scope of this SIP revision. The purpose of this SIP revision is to demonstrate how Texas meets the infrastructure requirements of FCAA, §110(a), including the interstate transport requirements of FCAA, §110(a)(2)(D)(i)(I), for the 2008 eight-hour ozone NAAQS. The infrastructure and transport demonstration explains how existing Texas statutes and rules will allow the state to meet its obligations under the FCAA. Therefore, issues concerning the White Stallion plant and the proposed Las Brisas Energy Center are beyond the scope of this SIP revision. Because this SIP revision does not include any information on the proposed Las Brisas Energy Center, nor does it specifically address controls in Corpus Christi, a public meeting was not conducted in Corpus Christi, Texas. Rather, because this SIP revision is a statewide plan for Texas, a public hearing was held in Austin, Texas.

Power plants are discussed in this SIP revision with respect to electric generating units (EGU) in Section 2.2.2: *Emissions Reductions from EGUs*. The SIP revision discusses existing control strategies specific to EGUs including: annual nitrogen oxides (NO_x) reductions from the Clean Air Interstate Rule (CAIR), utility electric generation in ozone nonattainment areas (30 TAC Chapter 117, Subchapter C), utility electric generation in east and central Texas (30 TAC Chapter 117, Subchapter E, Division 1), and Texas-specific legislation from the 1999 76th legislative session in Senate Bill 7 that requires NO_x reductions through a regional cap and trade program. This SIP revision does not include any information about the safety of coal-burning power plants or any related lawsuits.

GREENHOUSE GAS (GHG) PERMITTING

The EPA commented that it recently promulgated regulations for GHG permitting under the Prevention of Significant Deterioration (PSD) program. Because PSD under the FCAA applies to each newly regulated pollutant, including non-NAAQS pollutants, a state's PSD SIP must also apply permitting requirements for GHG emissions for the EPA to determine the PSD-related infrastructure elements of §110(a)(2) are sufficient.

No changes were made in response to this comment. Infrastructure SIP demonstrations are a requirement of §110(a)(1), which specifically requires each state to submit a plan demonstrating that it has all the required elements to ensure that the NAAQS can be implemented, maintained, and enforced. The EPA has failed

to offer any rationale for why the implementation of GHG permitting is necessary or required for the implementation, maintenance, or enforcement of the 2008 eight-hour ozone NAAQS. Therefore, the commission disagrees that Texas is required to have an approved GHG PSD permitting program in place to have an infrastructure SIP revision that is complete for the purposes of attaining and maintaining the 2008 eight-hour ozone NAAQS. Furthermore, GHG PSD permitting in Texas is currently under the control of the EPA through a federal implementation plan (FIP) specifically imposed by the EPA to ensure that GHG PSD permitting could occur in Texas. The imposition of the FIP fills any perceived hole in the Texas SIP, and therefore, the Texas infrastructure SIP should be considered complete and approvable. Lastly, Texas is currently litigating the EPA's position that implementation of GHG is necessary or required for the implementation, maintenance, or enforcement of the ozone and PM NAAQS. Therefore, the commission may consider this issue further based on the outcome of the litigation.

ADEQUACY OF CONTROLS AS REQUIRED BY FCAA, §110(a)(1) AND (a)(2)(A)

The AACOG questioned whether adequate controls and emission limitations are in place as required by §110(a)(2)(A) for the San Antonio-New Braunfels Metropolitan Statistical Area (MSA). San Antonio, designated attainment in 2008, was “the largest city in the United States in full compliance with all federal air quality standards.” However, on August 21, 2012, the area experienced a series of ozone exceedances that resulted in a violation of the 2008 ozone standard, with a preliminary 2012 design value of 80 parts per billion (ppb). The AACOG commented that the population of the MSA is expected to grow by 41% from 2010 to 2040, and oil and gas extraction in the Eagle Ford Shale has continued to develop. The AACOG also commented that there are no regional limits on NO_x permitted by the TCEQ for small sources such as oil and gas extraction. Public Citizen commented there are three areas monitoring above the 2008 ozone standard and that Texas is not meeting FCAA requirements due to lack of regional limits on NO_x emissions, especially for small sources like oil and gas, and lack of photochemical modeling requirements for permitting of large sources, like coal plants close to near-nonattainment and nonattainment areas. Public Citizen also commented that there is no thorough analysis of whether the existing control measures are sufficient to meet the requirements of §110(a)(1). Finally, Public Citizen commented that the TCEQ has specific authority to create districts to protect air quality under Texas Health and Safety Code, §382.012, State Air Control Plan, and §382.013, Air Quality Control Regions.

The purpose of this SIP revision is to demonstrate how Texas meets the infrastructure requirements of FCAA, §110(a), including the interstate transport requirements of FCAA, §110(a)(2)(D)(i)(I), for the 2008 eight-hour ozone NAAQS. The infrastructure demonstration explains how existing Texas statutes and rules will allow the state to meet its obligations under the FCAA. This SIP revision is not an attainment demonstration but a demonstration that basic program elements have been addressed for the 2008 eight-hour ozone NAAQS. Attainment demonstration SIP revisions will be developed for any Texas areas designated as moderate or above nonattainment of the 2008 eight-hour ozone NAAQS. Those SIP revisions will be developed with appropriate stakeholder input and will undergo separate notice and comment rulemaking procedures. At that time, the TCEQ will develop appropriate rules and control measures to bring those areas into attainment by the appropriate attainment deadlines. This infrastructure and transport SIP revision simply demonstrates that Texas has the appropriate

statutory and regulatory authority to develop necessary rules and control measures so that all areas of the state can either maintain the standard or meet and then attain the standard in the future.

The TCEQ agrees with Public Citizen that it has authority under Texas Health and Safety Code, §382.012 to “prepare and develop a general, comprehensive plan for the proper control of the state’s air” and §382.013 to “designate air quality control regions based on jurisdictional boundaries, urban-industrial concentrations, and other factors, including atmospheric areas, necessary to provide adequate implementation of air quality standards.” The SIP revision references the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, except Subchapter 1, in both Section V-A: *Legal Authority* and Section V-D-1: *Infrastructure Demonstration for the 2008 Ozone National Ambient Air Quality Standards*.

COMPLIANCE WITH THE FCAA

Public Citizen commented that the SIP revision does not meet the requirements of §110(a)(2)(C) due to lack of enforcement and failure to assess adequate penalties. Public Citizen also commented that permitting protections for attainment areas are inadequate, and although the EPA has not issued required photochemical modeling or region-wide limits on permitting of NO_x emission, the TCEQ has a responsibility to do this.

The TCEQ has the enforcement and permitting authority in place insofar as the agency has been given such jurisdiction from the state legislature. Whether or not Public Citizen agrees with the ways in which the TCEQ exercises such authority is a different issue that is beyond the scope of this SIP revision.

The EPA commented that §110(a)(2)(D)(ii) of the FCAA requires compliance with §115 of the FCAA, relating to interstate and international pollution abatement. Section 115 addresses endangerment of public health or welfare in foreign countries from pollution emitted in the United States. The EPA requested more discussion on how Texas complies with §115(c) of the FCAA.

Pursuant to §115(a), the EPA has not made TCEQ aware of submissions indicating reports, surveys, or studies from any duly constituted international agency regarding air pollution emitted in Texas, which may reasonably be anticipated to endanger public welfare or health in Mexico. Furthermore, under §115(a), based on information available to the TCEQ, the EPA has not been requested by the United States Secretary of State to issue formal notification to Texas that any emissions originating in the state are endangering public health or welfare in Mexico. In the absence of such a finding and notification, Texas has no obligations to address the endangerment of public health or welfare in Mexico under §115. Should Texas receive such a finding from the EPA in the future, the appropriate remedy would be a SIP revision to correct the endangerment, as specified in §115(b). As discussed in the infrastructure SIP, Texas has the proper authority and procedures in place to make revisions to its SIP when necessary. No changes were made to the SIP revision in response to this comment.

The TCEQ is unclear about the EPA’s concern with how Texas complies with §115(c), given that this section only concerns applicability of foreign countries.

The EPA commented that §126(a) of the FCAA requires new or modified sources to notify neighboring states of potential impacts from such sources. Section 126(b) of the FCAA affects a state only if the EPA has been petitioned to make a finding of violation that is related to either interstate transport or international transport of emissions from sources in the state. The EPA requested further discussion on how Texas complies with §126.

The Texas SIP requires that each major proposed new or modified source provide such notification (see 67 FR 58697). The state also has no pending obligations under §126 of the FCAA. The EPA has previously approved Texas' infrastructure SIP for §110(a)(2)(D)(ii), except as regarding GHG (see 76 FR 81371). The EPA's rationale for this approval can be found in the September 22, 2011, EPA Technical Support Document on the 1997 ozone and PM_{2.5} and 2006 PM_{2.5} infrastructure and transport SIP, Docket ID EPA-R06-OAR-2008-0638, page 16. Quoting EPA analysis:

Section 126 of the Act addresses interstate pollution abatement and section 126(a) requires that each applicable implementation plan shall require each major proposed new or modified source to notify neighboring states of potential impacts from the source. The Texas SIP addresses section 126 of the Act under their PSD rules at 30 TAC 116, Division 3 (Public Notice). Specifically, 30 TAC 116.131 provides that public notice be provided "[...] for any permit subject to the FCAA, Title I, Part C or D, or to Title 40 Code of Federal Regulations (CFR), Part 51.165(b)." Furthermore, the rules at 30 TAC 116.134 provide that "[...] the permit applicant shall furnish a copy of such notices and date of publication to [...] the air pollution control agency of any nearby state in which air quality may be adversely affected by the emissions from the new or modified facility." These rules were adopted into the Texas SIP on September 18, 2002 (67 FR 58709) and address section 126(a)(1)(A) and (B) of the Act. Section 126(b) of the Act provides that any state or political subdivision may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of section 110(a)(2)(D)(ii) of this title or this section. Within 60 days after receipt of any petition under this subsection and after public hearing, the Administrator shall make such a finding or deny the petition. We have not been made aware of any such pending actions pursuant to CAA section 126(b), thus we are proposing that the Texas SIP meets this portion of section 110(a)(2)(D)(ii). We are proposing that the Texas SIP meets the requirements of section 110(a)(2)(D)(ii).

Texas agrees that it meets the requirements of §110(a)(2)(D)(ii) and disagrees with the EPA's previous disapproval of this section for GHG. The EPA has failed to offer a rational explanation of why GHG PSD permitting is necessary for attaining or maintaining any NAAQS, including ozone or PM_{2.5}. As noted previously, Texas is currently litigating the EPA's final partial disapproval regarding the implementation of GHG permitting in Texas as it relates to infrastructure requirements. No changes were made to the SIP revision in response to this comment.

The EPA requested more discussion of how Texas' SIP complies with the conflict of interest provisions of §128 to satisfy the infrastructure SIP requirements of §110(a)(2)(E)(ii) of the FCAA.

The infrastructure demonstration states for §110(a)(2)(E) that “The TCEQ relies on the complete statutory and regulatory authority as referenced throughout this document.” The statutory authority includes Texas Water Code, Chapter C: Texas Natural Resources Commission, which includes the statutory requirements for the eligibility and selection of the commissioners of the TCEQ. These requirements ensure that Texas is in compliance with the FCAA, §128. The EPA has acknowledged this authority previously when it approved this portion of the Texas infrastructure SIP demonstration for the 1997 ozone and PM_{2.5} and 2006 PM_{2.5} NAAQS. Although infrastructure SIP revisions are NAAQS specific, the requirements of §110(a)(2)(E), specifically, are the same regardless of the criteria pollutant at issue. The EPA discussed its proposed approval of this section of the Texas ozone and PM_{2.5} infrastructure SIP in the EPA’s September 22, 2011, Technical Support Document, Docket ID EPA-R06-OAR-2008-0638, page 18. Quoting EPA analysis:

The TCEQ commissioners take final action on Texas state rules and their eligibility to serve as commissioner is subject to Section 128 of the FCAA. Section 128 requires that, (1) any board or body which approves permits or enforcement orders shall have at least a majority of members who represent the public interest and do not derive any significant portion of their income from persons subject to permits or enforcement orders under this chapter, and (2) any potential conflicts of interest by members of such board or body or the head of an executive agency with similar powers be adequately disclosed. The three commissioners of the TCEQ are appointed by the governor to represent the general public and their suitability and conduct are prescribed by the Texas Water Code (TWC). The state rules that address Section 128 of the FCAA are found in the TWC, Title 2 (Water Administration), Subtitle A (Executive Agencies), Chapter 5 (Texas Natural Resource Conservation Commission), Subchapter C (Texas Natural Resource Conservation Commission), Section 5.053: Eligibility for Membership; Section 5.054: Removal of Commission Members; Section 5.059: Conflict of Interest; Section 5.060: Lobbyist Prohibition; and Subchapter D (General Powers and Duties of the Commission), Section 5.111: Standards of Conduct. In 1981, the EPA approved into the SIP the Standards of Conduct of State Officers and Employees (Texas Revised Civil Statute Annotated, Article 6252-9b) (46 FR 61124). The current TWC rules retain the standards of conduct for state officers and employees approved in 1981. We are proposing that the Texas SIP meets the requirements of section 110(a)(2)(E).

Texas agrees that it meets the requirements of §110(a)(2)(E)(ii). No changes were made to the SIP revision in response to this comment.

Public Citizen commented that the SIP does not meet the requirements of §110(a)(2)(M) due to a lack of a SIP advisory group and the TCEQ’s rebuffing of requests and plans from local jurisdictions and advisory groups to address these requirements. Public Citizen also commented it is insufficient to merely provide an opportunity for public comment that is routinely ignored.

Section V-D-1: Infrastructure Demonstration for the 2008 Ozone National Ambient Air Quality Standards of the SIP revision references Texas Water Code, §5.107, Advisory Committees, Work Groups, and Task Forces. Under §5.107, the TCEQ is authorized to create and consult with advisory committees, work groups, or task forces, and does so when appropriate and necessary. Regarding public participation, the legal requirement is to provide a period for public comment; however, there is not a requirement to implement all comments or suggestions. The Texas Administrative Procedures Act (APA) governs rulemaking procedures in Texas.¹ SIP revisions, and rules associated with them, must also comply with the FCAA and federal regulations as defined in the Code of Federal Regulations (CFR).² Although the Texas APA requires an agency to fully consider all oral and written comments on a proposed rule,³ it does not prescribe the manner in which an agency shall respond to such comments. The TCEQ routinely responds in writing to all substantive comments received on SIP revisions and associated rules. The response typically details why the commission did or did not make changes in response to such comments.

TITLE 30 TEXAS ADMINISTRATIVE CODE (TAC) RULES FOR ADDRESSING FCAA, §110(a)(2)(D)(i)(II)

The EPA commented that on page xi of the proposal addressing §110(a)(2)(D) of the FCAA the TCEQ cross-references its discussion on §110(a)(2)(C) and relevant rules for meeting federal requirements. The EPA requested a more comprehensive listing of relevant rules in 30 TAC that address the federal requirements in §110(a)(2)(D)(i)(II). As written, the TCEQ states that Chapter 101, General Air Quality Rules and Chapter 122, Subchapter E, Division 2, Clean Air Interstate Rule of 30 TAC are the only relevant rules for meeting the requirements of §110(a)(2)(D)(i).

The commission confirms that 30 TAC Chapter 101, General Air Quality Rules and Chapter 122, Subchapter E, Division 2, Clean Air Interstate Rule are the relevant rules for meeting the infrastructure and transport requirements of §110(a)(2)(D)(i) including §110(a)(2)(D)(i)(II). FCAA, §110(a)(2)(D)(i)(II) requires that the SIP contain adequate provisions prohibiting any source or type of emissions activity within the state from emitting air pollutants in amounts that will interfere with *another state's SIP measures for preventing significant deterioration of air quality or to protect visibility*. Texas also has SIP-approved rules for PSD, as required by the FCAA.⁴ These rules are found in 30 TAC Chapter 116. Additionally, Texas has SIP-approved source-specific rules in 30 TAC Chapters 115 and 117 that require NO_x and volatile organic compounds (VOC) controls.

¹ TEX. GOV'T CODE ANN. §§ 2001.001 *et seq.*

² See 40 CFR Part 51, Subpart F.

³ TEX. GOV'T . CODE ANN. § 2001.029.

⁴ The EPA has recently promulgated regulations for the permitting of greenhouse gases under the PSD program. Although Texas has not amended or proposed amendments to its permitting program to include greenhouse gases, Texas is meeting its obligations under the FCAA to provide for permitting of facilities that emit criteria pollutants. Greenhouse gases are not criteria pollutants, with a NAAQS that must be met, and therefore a lack of permitting requirements in Texas rules for greenhouse gas emissions does not constitute a lack in the required infrastructure elements of §110(a)(2).

In addition to the general air quality rules in 30 TAC Chapter 101 and the CAIR rules in 30 TAC Chapter 122, Texas submitted a Regional Haze SIP revision to the EPA on March 19, 2009. Regional haze program requirements include progress reports due to the EPA in 2014 and every five years thereafter, to demonstrate progress toward the visibility goal. Another Regional Haze SIP is due in 2018 and every 10 years thereafter, through 2064. Furthermore, the EPA has already approved Texas' infrastructure and transport SIP for §110(a)(2)(D)(i)(II) for the 1997 eight-hour ozone and PM_{2.5} NAAQS, and the 2006 PM_{2.5} NAAQS, except as regards GHG PSD permitting requirements (see 76 *Federal Register* 58748, at 58755 (September 22, 2011)). Texas agrees that it meets the requirements of §110(a)(2)(D)(ii), and disagrees with EPA's previous disapproval of this section for GHGs. The EPA has failed to offer a rational explanation of why GHG PSD permitting is necessary for attaining or maintaining any NAAQS, including either the 1997 or the 2008 eight-hour ozone standards. In response to this comment, the commission has expanded the list of relevant rules to include 30 TAC Chapters 115, 116, and 117.

FUNDING AND FCAA, §110(a)(2)(E)

The AACOG commented that local efforts are underway to address recent ozone exceedances in the San Antonio-New Braunfels MSA but questioned whether the SIP revision meets the requirements of §110(a)(2)(E)(i) to provide "necessary assurances that the state will have adequate personnel, funding, and authority under state law to carry out" the SIP. The AACOG mentioned TCEQ funding cuts as well as local air quality planning funding cuts in the AACOG region.

Public Citizen commented that the SIP may not meet the requirements of §110(a)(2)(E) because the TCEQ is spending half as much on air quality in the current fiscal year and biennium than the previous year. Public Citizen also commented that the Texas Emissions Reduction Plan (TERP), one of the largest emission reduction measures for several areas resulting in over 3 tons per day (tpd) of NO_x reductions, is underfunded by \$50 million. The TCEQ has failed to request full funding and an exceptional item to recover some or all of the \$601 million in sequestered TERP funding to meet early SIP commitments. Public Citizen also mentioned that TCEQ staff has routinely informed them that they "don't have the resources" to assist with emissions inventory projects or other analysis to assist committees like the North Central Texas Clean Air Working Group.

Part of the TCEQ's role is to determine how to appropriately distribute resources. Like all agencies, the TCEQ prioritizes the allocation of resources to items that require the most attention and that does not always align with the needs and requests of local areas.

Section 110(a)(2)(E) requires that the TCEQ ensure that it has adequate resources to carry out its responsibilities under the SIP and that any local jurisdiction upon which any portion of the SIP relies has adequate resources to carry out its responsibilities. The TCEQ works with local governments and other stakeholders during the SIP development process to assess all measures to be included in the SIP that will be implemented at the local level. After the SIP development process is completed, the TCEQ continues to provide support to local governments by participating in local air quality planning committees and through the general

conformity and transportation conformity processes. Further, through the Rider 8 program, the TCEQ administers grant funding and provides technical and planning assistance to specified local governments that are attaining the 2008 eight-hour ozone standard to assist them in their efforts to maintain their attainment status.

The TERP appropriation was reduced by about \$50 million per fiscal year from the last biennium. Funding decisions are made by the legislature, which determines the priority for TERP funding, not the TCEQ. However, the current TERP appropriations and associated emission reductions are still significant in addressing mobile source emissions. The TERP projects funded to date (from the beginning of the program in 2001 through August 31, 2012) are projected to result in NO_x reductions of around 60 tpd in the TERP-eligible counties.

The commission disagrees that the Texas SIP may not meet the requirements of §110(a)(2)(E) or that specific equivalent funding is necessary every year. The EPA has not adopted rules that require a specific amount of funding to be spent on air quality programs. Instead, states are obligated to assess their programs and funding to assure that they have adequate resources to meet their FCAA obligations. Furthermore, the EPA has already approved Texas' infrastructure and transport SIP demonstration for §110(a)(2)(E) for the 1997 eight-hour ozone and PM_{2.5} NAAQS and 2006 PM_{2.5} NAAQS.

In response to this comment, discussion of how Texas meets the requirements of §110(a)(2)(E), on page xii of the SIP revision narrative, has been revised.

EMISSIONS INVENTORY DEVELOPMENT

The AACOG commented that it will continue with minimal resources in partnership with the TCEQ to create an Eagle Ford Shale ozone precursor emissions inventory. Based on recent ozone violations in the San Antonio MSA, the AACOG requested that resources be devoted to the Eagle Ford Shale emissions inventory on the scale devoted to the Barnett Shale emissions inventory work. Public Citizen commented that the San Antonio area has become a nonattainment area, possibly resulting from air emissions that occurred because the TCEQ has failed to put forth even minimal effort in the Eagle Ford Shale.

The purpose of this SIP revision for ozone infrastructure and transport is to meet the infrastructure requirements of the FCAA, §110(a), including the emissions reporting requirements of FCAA, §110(a)(2)(F). The infrastructure and transport demonstration explains how existing Texas statutes and rules will allow the state to meet those requirements. Specific issues concerning emissions inventory work in the Eagle Ford Shale are beyond the scope of this SIP revision.

The TCEQ will continue to partner with the AACOG through the Rider 8 grant program to support its work on the Eagle Ford Shale emissions inventory. The TCEQ also continues to monitor the Eagle Ford Shale by conducting flyovers of the area with infrared cameras, conducting investigations, and developing emissions inventories for all source categories including the oil and gas sector in these counties. The TCEQ has also made compliance information and tools available to the oil and gas industry at the [Oil & Gas Facilities: Compliance Resources](#) Web page.

Public Citizen commented that the TCEQ has tried and failed to complete detailed equipment and emissions inventory in the Barnett Shale relying instead on voluntary reporting and work from other governmental agencies that may not have been up to the standards necessary to make policy.

Although specific issues concerning the emissions inventory work in the Barnett Shale are beyond the scope of this infrastructure SIP revision, the TCEQ disagrees with this comment. The TCEQ conducted a special inventory that captured actual air emissions data and detailed equipment information from stationary oil and gas operations associated with the Barnett Shale formation.

The Barnett Shale Special Inventory represents one of the first large-scale efforts nationally to directly survey area (nonpoint) oil and gas emissions sources that generally would not report to the point source emissions inventory. The TCEQ received special inventory data from companies that account for more than 99% of the 2009 production in the Barnett Shale formation. Specifically, data for more than 8,500 oil and gas sites were received. Due to the large volume of data received, county-level summary data for both phases of the Barnett Shale special inventory are available at: <http://www.tceq.texas.gov/airquality/point-source-ei/psei.html>.

AUTHORITY OF THE TCEQ TO REVISE THE TEXAS SIP

The EPA commented that regarding §110(a)(2)(H) the TCEQ explained that it regularly revises the Texas SIP in response to revisions in the NAAQS and EPA rules and cross-references its discussion on §110(a)(2)(A). As §110(a)(2)(H) requires that a state have the authority to revise the SIP as necessary, the EPA recommended the TCEQ provide additional discussion of and reference to such authority that allowed the TCEQ to make the regular revisions as stated.

The TCEQ's statutory and regulatory authority to revise its SIP as necessary is broadly contained within the statutes and rules referenced throughout this infrastructure and transport SIP revision. Furthermore, the EPA has previously approved Texas' infrastructure SIP for 1997 ozone and PM_{2.5} and 2006 PM_{2.5} for §110(a)(2)(H) (see 76 FR 81371). Although infrastructure SIP revisions are NAAQS specific, the requirements of §110(a)(2)(H) are the same regardless of the criteria pollutant at issue. The TCEQ's authority to revise Texas' SIP to address any future problems with the 2008 eight-hour ozone NAAQS is consistent with its authority to revise its SIP for any other NAAQS. The EPA proposed approval of this section of the Texas ozone and PM_{2.5} infrastructure SIP in the EPA's September 22, 2011, Technical Support Document, Docket ID EPA-R06-OAR-2008-0638, page 23.

Quoting EPA analysis:

... the TCAA authorizes the TCEQ to establish the level of quality to be maintained in the state's air and to control the quality of the state's air by preparing and developing a SIP under §382.011 and 382.012. The TCAA under §382.011 further provides the TCEQ with "the powers necessary or convenient to carry out its responsibilities." Section 382.017 authorizes the TCEQ to adopt rules and §382.036 requires that the TCEQ "advise, consult, and cooperate with [...] the federal government." Thus, Texas has the authority to revise its SIP as may be necessary to account for revisions of the NAAQS, adopt more effective methods of attaining the NAAQS, and respond

to EPA SIP calls. We are proposing that the Texas SIP meets the requirements of §110(a)(2)(H).

Additionally, the EPA’s historical interpretation has been that SIPs are subject to revision as standards and the ability to meet those standards change. The EPA has stated that it is immaterial whether or not a state has acknowledged that its plan may change. The EPA first made this finding in the May 31, 1972, regulation titled Part 52 – Approval and Promulgation of Implementation Plans, 37 FR 10842, at 10846, stating, “In accordance with the Act and the Administrator's regulations (40 CFR 51.6), all State plans are subject to revision, as necessary, to take account of revisions of the national standards, availability of improved or more expeditious methods of attaining the national standards, or a finding by the Administrator that a State plan is substantially inadequate to attain or maintain a national standard. Accordingly, whether a state has acknowledged that its implementation plan is subject to revision is considered immaterial.” No changes were made to the SIP revision in response to this comment.

INTERSTATE TRANSPORT AND FCAA, §110(a)(2)(D)(i)(I)

The EPA commented that on August 21, 2012, the United States (U.S.) Court of Appeals for the District of Columbia (D.C.) Circuit issued a decision to vacate the Cross-State Air Pollution Rule (CSAPR). The EPA is evaluating the court decision as it pertains to FCAA, §110(a)(1) and (2) infrastructure and transport SIP requirements. Therefore, at this time the EPA did not comment on the TCEQ’s proposed SIP revision in Section VI: *Control Strategy* to address the requirements of §110(a)(2)(D)(i)(I) for ozone transport under the 2008 eight-hour ozone NAAQS.

The SIP revision has been updated to include that on August 21, 2012, the U.S. Court of Appeals for the D.C. Circuit vacated CSAPR. Under the court’s ruling, the Clean Air Interstate Rule (CAIR) will remain in place until the EPA develops a valid replacement for CAIR. These updates are included in Section VI: *Control Strategy*, Section L: *Transport*, Chapter 2: *Required Control Strategy Elements*, Section 2.2.2.1: *CAIR and Cross-State Air Pollution Rule (CSAPR)*.

Public Citizen commented that the SIP revision fails to analyze Texas impact on downwind states and fails to accurately account for ozone emissions entering Texas from other states.

The TCEQ disagrees with this comment. FCAA, §110(a)(2)(D)(i)(I) requires states to submit a SIP revision that contains adequate provisions to prohibit any source or other type of emissions activity within the state from emitting any air pollutants in amounts that will contribute significantly to nonattainment of the NAAQS for areas in other states or interfere with maintenance of the NAAQS in any other state. First, this provision does not require the state to accurately account for ozone emissions entering Texas from other states. Section 110(a)(2)(D)(i)(I) only requires the state to address its impact on downwind states. Further, the SIP revision does address the potential impact on nearby states by including analysis of ozone design values, ozone design value trends in Texas as well as in other states located in Region 6, and the distance between the nonattainment areas in Texas compared to the other nonattainment areas in Region 6.

The TCEQ developed the transport technical analysis included in this SIP revision with available information and guidance. To date, the EPA has not yet proposed infrastructure or transport guidance for the 2008 ozone NAAQS.

Public Citizen commented that based on the TCEQ's repeated permitting of large power plants and other emissions sources that evidence shows will impact the NAAQS, the TCEQ has no real intention of complying with the requirements of FCAA, §110(a)(2)(D).

The TCEQ strongly disagrees with the comment that it has “no real intention of complying” with the requirements of §110(a)(2)(D). The TCEQ is committed to meeting the requirements of the FCAA and takes its duties to Texas citizens very seriously. As stated in the SIP revision, Texas has a SIP-approved PSD and nonattainment New Source Review permitting program (for all pollutants except for GHGs, for which EPA has issued a FIP and assumed responsibility) that contains requirements for sources of air pollutants to obtain an approved permit before beginning construction of a facility and before modifying an existing facility. All permitted sources in Texas are required to comply with all state and federal rules and regulations including the NAAQS.

**ORDER ADOPTING
REVISION TO THE STATE IMPLEMENTATION PLAN**

Docket No. 2012-1087-SIP
Project No. 2012-004-SIP-NR

On December 5, 2012, the Texas Commission on Environmental Quality (Commission), during a public meeting, considered adoption of revisions to the state implementation plan (SIP). The Commission adopts revisions to the SIP for Infrastructure and Transport of the 2008 Ozone National Ambient Air Quality Standard (NAAQS). The Commission adopts the SIP revision demonstrating that Texas is not contributing significantly to nonattainment of the 2008 ozone NAAQS for areas in other states; not interfering with the maintenance of the 2008 ozone NAAQS in any other state; not interfering with measures required to meet an implementation plan for any other state related to prevention of significant deterioration (PSD); and not interfering with measures required to meet the implementation plan for any other state related to regional haze and visibility. Under Tex. Health & Safety Code Ann. §§ 382.011, 382.012, and 382.023 (Vernon 2011), the Commission has the authority to control the quality of the state's air and to issue orders consistent with the policies and purposes of the Texas Clean Air Act, Chapter 382 of the Tex. Health & Safety Code. Notice of the proposed SIP revisions was published for comment in the September 7, 2012 issue of the *Texas Register* (37 TexReg 7221).

Pursuant to 40 Code of Federal Regulations § 51.102 and after proper notice, the Commission conducted a public hearing to consider the revision to the SIP. Proper notice included prominent advertisement in the areas affected at least 30 days prior to the date of the hearing. A public hearing was held in Austin on September 25, 2012.

The Commission circulated hearing notices of its intended action to the public, including interested persons, the Regional Administrator of the EPA, and all applicable local air pollution control agencies. The public was invited to submit data, views, and recommendations on the proposed SIP revision, either orally or in writing, at the hearing or during the comment period. Prior to the scheduled hearing, copies of the proposed SIP revision were available for public inspection at the Commission's central office and on the Commission's Web site.

Data, views, and recommendations of interested persons regarding the proposed SIP revisions were submitted to the Commission during the comment period, and were considered by the Commission as reflected in the analysis of testimony incorporated by reference to this Order. The Commission finds that the analysis of testimony includes the names of all interested groups or associations offering comment on the proposed SIP revisions and their position concerning the same.

IT IS THEREFORE ORDERED BY THE COMMISSION that the revisions to the SIP incorporated by reference to this Order are hereby adopted. The adopted revisions to the SIP are incorporated by reference in this Order as if set forth at length verbatim in this Order.

IT IS FURTHER ORDERED BY THE COMMISSION that on behalf of the Commission, the Chairman should transmit a copy of this Order, together with the adopted revisions to the SIP, to the Regional Administrator of EPA as a proposed revisions to the Texas SIP pursuant to the Federal Clean Air Act, codified at 42 U.S. Code Ann. §§ 7401 - 7671q, as amended.

If any portion of this Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

Date issued:

**TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY**

Bryan W. Shaw, Ph.D., Chairman