

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

**AGENDA REQUESTED: April 27, 2016**

**DATE OF REQUEST: April 8, 2016**

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

**CAPTION: Docket No. 2015-1651-SIP.** Consideration for publication of, and hearing on, the proposed Collin County Redesignation Request and Maintenance Plan State Implementation Plan (SIP) Revision for the 2008 Lead National Ambient Air Quality Standard (NAAQS).

The proposed SIP revision would request that the United States Environmental Protection Agency redesignate the Collin County area to attainment for the 2008 lead NAAQS and provide a maintenance plan that will ensure the area remains in attainment of the NAAQS through 2028. (Brian Foster, Amy Browning) (Non-Rule Project No. 2016-003-SIP-NR)

Steve Hagle, P.E.  

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**Deputy Director**

David Brymer  

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**Division Director**

Joyce Spencer-Nelson  

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**Agenda Coordinator**

**Copy to CCC Secretary? NO X YES**

# **Texas Commission on Environmental Quality**

## **Interoffice Memorandum**

**To:** Commissioners **Date:** April 8, 2016

**Thru:** Bridget C. Bohac, Chief Clerk  
Richard A. Hyde, P.E., Executive Director

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

**Docket No.:** 2015-1651-SIP

**Subject:** Commission Approval for Proposed Collin County Redesignation Request and Maintenance Plan State Implementation Plan (SIP) Revision for the 2008 Lead National Ambient Air Quality Standard (NAAQS)

Collin County Lead Redesignation and Maintenance Plan SIP Revision  
Non-Rule Project No. 2016-003-SIP-NR

**Background and reason(s) for the SIP revision:**

On October 15, 2008, the United States Environmental Protection Agency (EPA) substantially revised the lead NAAQS from 1.5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), established in 1978, to a new level of  $0.15 \mu\text{g}/\text{m}^3$ . Effective December 31, 2010, the EPA designated an area surrounding Exide Technologies (Exide) located in Frisco, Collin County, as nonattainment for the 2008 lead NAAQS (75 FR 71033).

Section 110(a)(1) of the Federal Clean Air Act (FCAA) requires states to submit a SIP revision for areas that have been designated nonattainment to provide for the implementation, maintenance, and enforcement of the NAAQS. On August 8, 2012, the commission approved adoption of the Collin County Attainment Demonstration SIP Revision for the 2008 Lead NAAQS and an Agreed Order between the Texas Commission on Environmental Quality (commission) and Exide. The control measures and contingency measures that were identified for the Collin County Lead Attainment Demonstration SIP revision were made enforceable through Agreed Order No. 2011-0521-MIS between the commission and Exide. The Agreed Order provided that enforceable measures be implemented to reduce lead emissions in the Collin County lead nonattainment area as soon as possible but no later than January 6, 2014. The SIP revision and Agreed Order contained contingency measures designed to ensure continued compliance with the standard.

On June 4, 2012, the City of Frisco and Exide approved an agreement involving the sale of approximately 180 acres of undeveloped land surrounding Exide's plant. Under the terms of the agreement, the land around Exide's plant would be purchased by the Frisco Community Development Corporation and the Frisco Economic Development Corporation. The agreement stipulates that Exide will retain ownership of and responsibility for cleaning up the permitted plant site. The SIP revision and Agreed Order were revised on August 8, 2012 to reflect this agreement, approved by the commission on August 8, 2012, and submitted to the EPA on October 10, 2012.

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Instead of implementing control measures identified in the SIP revision and Agreed Order for continued operation, per Exide's agreement with the City of Frisco, Exide chose the option to close the plant and cease all production activities. Exide began curtailing certain recycling operations on November 1, 2012 and ceased all recycling operations on November 30, 2012. The facility is now permanently shut down. Decontamination and demolition of Exide's lead recycling facility was completed on August 15, 2013. Soil remediation activities at the plant site and surrounding property are still being conducted.

The area is required to have the three-month rolling average monitoring data below the NAAQS for 36 consecutive months to comply with the NAAQS. Between January 1, 2013 and December 31, 2015, all three-month rolling averages were below the lead NAAQS. The current design value is  $0.08 \mu\text{g}/\text{m}^3$  as of December 31, 2015. Thus, the area achieved compliance with the 2008 lead NAAQS by December 31, 2015.

Certification of 2015 lead data for the Frisco area was submitted to the EPA on February 29, 2016 (attached), in advance of the May 1, 2016 certification deadline. Validated 2015 data is necessary to demonstrate the area has monitored attainment of the lead NAAQS.

**Scope of the SIP revision:**

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

This proposed SIP revision would request that the Collin County nonattainment area be redesignated to attainment for the 2008 lead standard and provide a maintenance plan that would ensure the area remains in attainment of the standard through 2028.

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

Section 107(d)(3)(E) of the FCAA states that the EPA can redesignate an area to attainment if the following conditions are met.

- The EPA has determined that the NAAQS has been attained.
- The applicable implementation plan has been fully approved by the EPA under Section 110(k).
- The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
- The EPA has fully approved a maintenance plan, including a contingency plan, for the area under Section 175A.
- The state has met all applicable requirements for the area under the FCAA, Section 110 and Part D.

Section 175A(a) of the FCAA indicates that states that submit a request for redesignation for attaining the NAAQS shall also submit a maintenance plan to provide for the maintenance of the standard for at least 10 years from the effective date of approval of the maintenance plan by the EPA.

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

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None.

**Statutory authority:**

The authority to propose and adopt the SIP revision is derived from FCAA, §110, which requires states to submit SIP revisions that contain enforceable measures to achieve the NAAQS, FCAA, §175A, regarding maintenance plans, 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:**

There would be no impact since Exide ceased operations and permanently shut down the plant.

**B.) Public:**

If approved by the EPA, the public would benefit from continued maintenance of air quality and not having an area designated as nonattainment for the lead NAAQS in the local area.

**C.) Agency programs:**

The agency will continue to use existing resources to monitor ambient air quality. The Air Quality Division will continue to coordinate with the Remediation Division during the remediation process.

**Stakeholder meetings:**

Solicitation of public comment and public hearing will occur after commission approval of the proposal. Because there are no new rules associated with this SIP revision, no stakeholder meetings are planned.

**Potential controversial concerns and legislative interest:**

During the development of the Collin County Attainment Demonstration for the 2008 Lead NAAQS SIP revision (Project No. 2011-001-SIP-NR), the EPA expressed concern regarding the impact of remediation of the Exide facility on ambient lead concentrations near the site. As the remediation of the site has been delayed and is anticipated to be ongoing throughout the maintenance period, the EPA may request special consideration of this issue in the maintenance plan.

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

No

Commissioners

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

The commission could choose to not submit a request for redesignation and the area would remain as nonattainment.

**Key points in the proposal SIP schedule:**

**Anticipated proposal date:** April 27, 2016

**Anticipated publication of hearing notice in *Texas Register*:** May 13, 2016

**Anticipated public hearing date:** June 2, 2016

**Anticipated public comment period:** April 29, 2016 – June 3, 2016

**Anticipated adoption date:** October 19, 2016

**Agency contacts:**

Brian Foster, SIP Project Manager, Air Quality Division, (512) 239-1930

Amy Browning, Staff Attorney, (512) 239-0891

Joyce Spencer-Nelson, Division Liaison, (512) 239-5017

Attachment: 2015 Annual Data Certification for Frisco area lead

cc: Chief Clerk, 2 copies  
Executive Director's Office  
Marshall Coover  
Erin Chancellor  
Stephen Tatum  
Jim Rizk  
Office of General Counsel  
Brian Foster  
Joyce Spencer-Nelson

REVISIONS TO THE STATE OF TEXAS AIR QUALITY  
IMPLEMENTATION PLAN FOR THE CONTROL OF LEAD AIR  
POLLUTION

COLLIN COUNTY LEAD NONATTAINMENT AREA



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
P.O. BOX 13087  
AUSTIN, TEXAS 78711-3087

**COLLIN COUNTY REDESIGNATION REQUEST AND  
MAINTENANCE PLAN STATE IMPLEMENTATION PLAN  
REVISION FOR THE 2008 LEAD NATIONAL AMBIENT AIR  
QUALITY STANDARD**

PROJECT NUMBER 2016-003-SIP-NR

Proposal  
April 27, 2016

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## EXECUTIVE SUMMARY

On October 15, 2008, the United States Environmental Protection Agency (EPA) substantially revised the lead National Ambient Air Quality Standard (NAAQS) from 1.5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), established in 1978, to a level of  $0.15 \mu\text{g}/\text{m}^3$ . Effective December 31, 2010, the EPA designated an area surrounding Exide Technologies (Exide) located in Frisco, Collin County, as nonattainment for the 2008 lead NAAQS (75 *Federal Register* 71033). Under the nonattainment designation, the area was given until December 31, 2015, to attain the lead standard. To demonstrate attainment, the area is required to have three-month rolling average monitoring data below the NAAQS for 36 consecutive months. Between January 1, 2013 and December 31, 2015, there was not a three-month rolling average above the lead NAAQS. The current design value is  $0.08 \mu\text{g}/\text{m}^3$  as of December 31, 2015. Thus, the area achieved compliance of the 2008 lead NAAQS by the December 31, 2015 deadline.

Section 107(d)(3)(E) of the Federal Clean Air Act (FCAA) states that the EPA can redesignate an area to attainment if all of the following conditions are met.

1. The EPA has determined that the NAAQS have been attained.
2. The applicable implementation plan has been fully approved by the EPA under the FCAA, Section 110(k).
3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
4. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under Section 175A of the FCAA.
5. The state has met all applicable requirements for the area under the FCAA, Section 110 and Part D.

The EPA's redesignation guidance recommends that states seeking redesignation of a nonattainment area consider the following provisions in their maintenance plan:<sup>1</sup>

- an attainment emissions inventory;
- a maintenance demonstration;
- verification of continued attainment;
- monitoring network verification; and
- a contingency plan.

With this proposed state implementation plan revision, the Texas Commission on Environmental Quality is submitting a request that the Collin County lead nonattainment area be redesignated to attainment for the 2008 lead standard and that the EPA approve the associated proposed maintenance plan.

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<sup>1</sup> USEPA: "Procedures for Processing Requests to Redesignate Areas to Attainment" Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992.



## **SECTION V-A: LEGAL AUTHORITY**

### 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, 2011, 2013, and 2015. 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 of the Water Code. 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.

#### 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  
TEXAS WATER CODE

September 1, 2015  
September 1, 2015

#### 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	December 31, 2015
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)	December 31, 2015
Chapter 101: General Air Quality Rules	June 25, 2015
Chapter 106: Permits by Rule, Subchapter A	April 17, 2014
Chapter 111: Control of Air Pollution from Visible Emissions and Particulate Matter	February 6, 2014
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	May 21, 2015
Chapter 115: Control of Air Pollution from Volatile Organic Compounds	June 25, 2015
Chapter 116: Permits for New Construction or Modification	July 31, 2014
Chapter 117: Control of Air Pollution from Nitrogen Compounds	June 25, 2015
Chapter 118: Control of Air Pollution Episodes	March 5, 2000
Chapter 122: §122.122: Potential to Emit	April 17, 2014
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 VI: CONTROL STRATEGY**

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- B. Ozone (No change)
- C. Particulate Matter (No change)
- D. Carbon Monoxide (No change)
- E. Lead (Revised)
  - 1. 1980 State Implementation Plan for the Control of Lead Air Pollution (No change)
  - 2. 1993 Lead SIP Revisions for Collin County (No change)
  - 3. 1999 Lead SIP Revisions for Collin County (No change)
  - 4. 2009 Collin County Maintenance Plan for Lead (No change)
  - 5. 2011 Collin County Attainment Demonstration SIP Revision for the 2008 Lead NAAQS (No change)
  - 6. Collin County Redesignation Request and Maintenance Plan SIP Revision for the 2008 Lead NAAQS (New)
- 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)
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## **LIST OF ACRONYMS**

AQS	Air Quality System
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
FCAA	Federal Clean Air Act
FR	<i>Federal Register</i>
NAAQS	National Ambient Air Quality Standard
SIP	state implementation plan
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
µg/m <sup>3</sup>	micrograms per cubic meter

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## **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](http://www.tceq.texas.gov/airquality/sip/sipintro.html#History) Web page (<http://www.tceq.texas.gov/airquality/sip/sipintro.html#History>) on the [Texas Commission on Environmental Quality's](http://www.tceq.texas.gov) (TCEQ) website (<http://www.tceq.texas.gov>).

### **1.2 PURPOSE**

The Texas Commission on Environmental Quality (TCEQ) is seeking redesignation of the Collin County lead nonattainment area to attainment for the 2008 lead National Ambient Air Quality Standard (NAAQS) under section 107(d)(3)(E) of the Federal Clean Air Act (FCAA), which states that the United States Environmental Protection Agency (EPA) can redesignate an area to attainment if all of the following conditions are met.

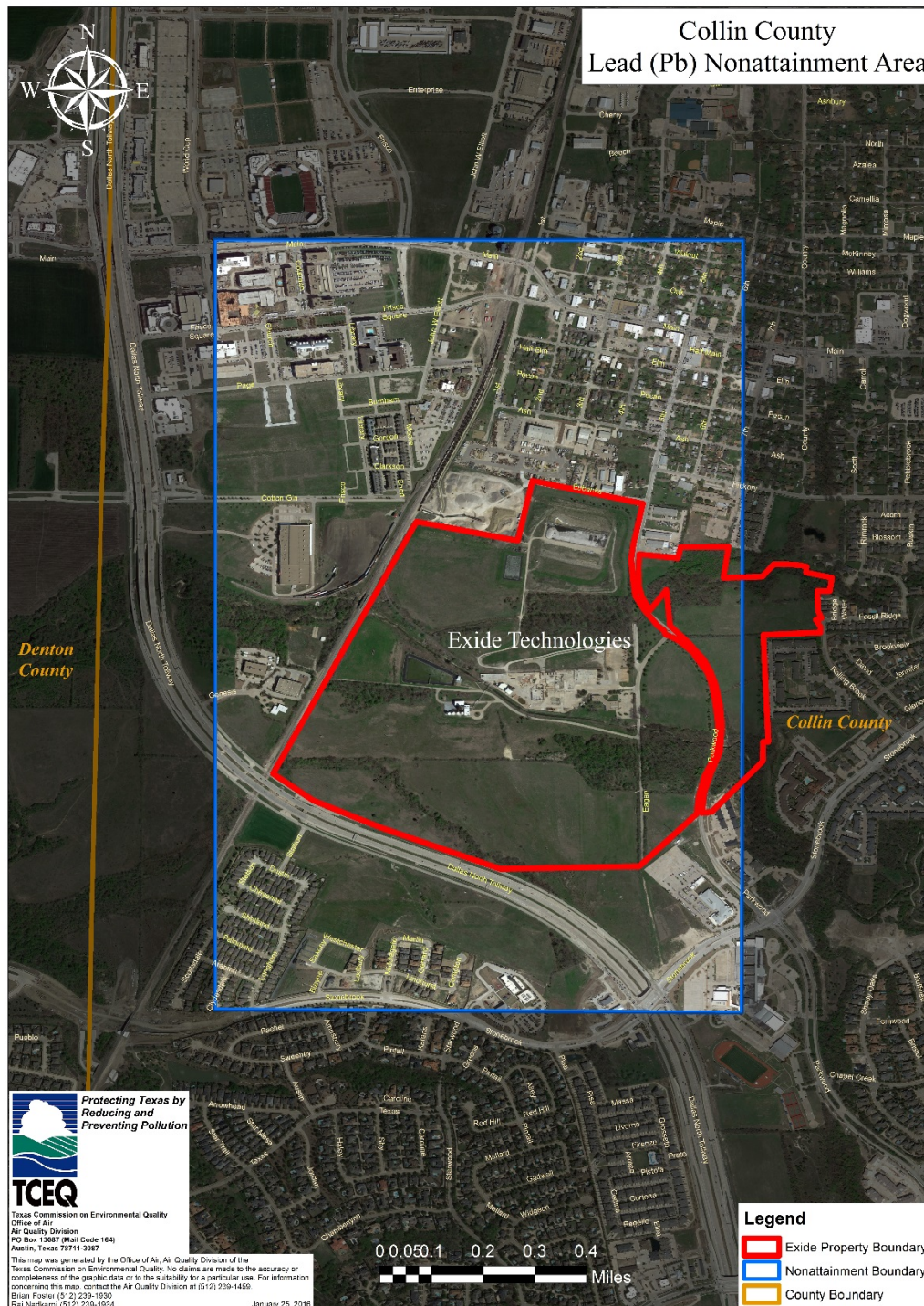
1. The EPA has determined that the NAAQS have been attained.
2. The applicable implementation plan has been fully approved by the EPA under the FCAA, Section 110(k).
3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
4. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under Section 175A of the FCAA.
5. The state has met all applicable requirements for the area under the FCAA, Section 110 and Part D.

The purpose of this proposed state implementation plan (SIP) revision is to address all of the above requirements, including submittal of a maintenance plan that will fulfill the requirements under Section 107(d)(3)(E) of the FCAA and ensure the Collin County lead nonattainment area continues to attain the 2008 lead standard. This proposed revision includes a commitment to submit a second 10-year maintenance plan in eight years as required by the FCAA, i.e., two years before the end of the first 10-year maintenance plan period.

### **1.3 LEAD HISTORY IN THE COLLIN COUNTY AREA**

The EPA designated a portion of Collin County as a lead nonattainment area for the 1978 lead NAAQS on November 6, 1991 (56 *Federal Register* (FR) 56694). The EPA approved the Collin County lead attainment demonstration SIP revision for the 1978 lead NAAQS on November 29, 1994 (59 FR 60930). The EPA redesignated the area to attainment and approved a 10-year maintenance plan in October 15, 1999 (64 FR 55421). In 2009, the TCEQ submitted to the EPA a second and final 10-year maintenance plan for the 1978 lead NAAQS. The maintenance plan included contingency measures to promptly correct any violation of the 1978 lead NAAQS.

On November 12, 2008, the EPA substantially revised the NAAQS for lead. The standard, set at 0.15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), measured as a rolling three-month average, is significantly more stringent than the 1978 standard of 1.5  $\mu\text{g}/\text{m}^3$ , measured as a quarterly average (73 FR 66964). On November 22, 2010, the EPA designated a portion of Collin County surrounding Exide Technologies (Exide) as nonattainment for the 2008 lead NAAQS, effective December 31, 2010 (75 FR 71033). Figure 1-1: *Map of Collin County Lead Nonattainment Area for the 2008 Lead NAAQS* provides a visual representation of the nonattainment area.



**Figure 1-1: Map of Collin County Lead Nonattainment Area for the 2008 Lead NAAQS**

On August 8, 2012, the commission approved adoption of the Collin County Attainment Demonstration SIP Revision for the 2008 Lead NAAQS and an Agreed Order between the TCEQ and Exide. In accordance with FCAA, §172 and implementation guidance published with the November 12, 2008, final lead NAAQS (73 FR 66964), the SIP revision contained a reasonably



available control measure and a reasonably available control technology analysis; demonstration of attainment through air dispersion modeling; a control strategy demonstration; an emissions inventory; a demonstration of reasonable further progress; and contingency measures.

The control measures and contingency measures that were identified for the Collin County Lead Attainment Demonstration SIP revision were made enforceable through Agreed Order No. 2011-0521-MIS between the commission and Exide. The Agreed Order provided that enforceable measures be implemented to reduce lead emissions in the Collin County lead nonattainment area as soon as possible, but no later than January 6, 2014. The SIP revision and Agreed Order contained contingency measures designed to ensure continued compliance with the standard.

On June 4, 2012, the City of Frisco and Exide approved an agreement involving the sale of approximately 180 acres of undeveloped land surrounding Exide's plant. Under the terms of the agreement, the land around Exide's plant would be purchased by the Frisco Community Development Corporation and the Frisco Economic Development Corporation. The agreement stipulates that Exide will retain ownership of the federal and state permitted plant site and that Exide will retain responsibility for cleaning up the permitted plant site. The SIP revision and Agreed Order were revised on August 8, 2012 to reflect this agreement.

Instead of implementing control measures identified in the SIP revision and Agreed Order for continued operation, per Exide's agreement with the City of Frisco, Exide chose the option to close the plant and cease all production activities. Effective November 1, 2012, Exide began curtailing certain recycling operations and all recycling operations ceased operation on November 30, 2012. The facility is now permanently shut down. Decontamination and demolition of Exide's lead recycling facility was completed on August 15, 2013. Soil remediation activities at the plant site and surrounding property are still being conducted.

Compliance with the 2008 lead NAAQS is based on 36 three-month rolling averages. For an ambient air monitoring site to meet this standard, no three-month rolling average for the previous 36 months prior to the attainment date may exceed  $0.15 \mu\text{g}/\text{m}^3$ . The EPA's deadline for Collin County to attain the 2008 lead NAAQS was as expeditiously as practicable, but no later than December 31, 2015. Between January 1, 2013 and December 31, 2015, all three-month rolling averages were below the lead NAAQS at all of the four ambient air monitoring sites located around the Exide property. Therefore, the area achieved compliance of the 2008 lead NAAQS as of December 31, 2015. Appendix B: *Monitoring Data from Collin County Lead Monitors* describes available monitoring data in Collin County for the years 2013 through 2015.

#### **1.4 PUBLIC HEARING AND COMMENT INFORMATION**

The commission will offer a public hearing for this Collin County Lead Redesignation SIP Revision on June 2, 2016 at 2:00 p.m. The public hearing will be held in Frisco, Texas, at the George A. Purefoy Municipal Center, 6101 Frisco Square Boulevard, City Council Chambers.

The public comment period will open on April 29, 2016 and close on June 3, 2016. Notice of public hearing for this Collin County Lead Redesignation and Maintenance Plan SIP Revision will be published in the *Texas Register* and the *Dallas Morning News* and *Frisco Enterprise* newspapers. Comments will be accepted via mail, fax, or through the eComments system. All comments should reference the "Collin County Lead Redesignation and Maintenance Plan SIP Revision" and Project Number 2016-003-SIP-NR. Comments may be submitted through the [eComments](http://www1.tceq.texas.gov/rules/ecomments/index.cfm) (<http://www1.tceq.texas.gov/rules/ecomments/index.cfm>) system. File size restrictions may apply to comments being submitted via the eComments system. Written comments may also be submitted to Brian Foster, MC 206, State Implementation Plan Team,

Office of Air, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-6188. Comments must be received by June 3, 2016. An electronic version of this proposed Collin County Lead Redesignation and Maintenance Plan SIP revision and appendices can be found at the TCEQ's [Dallas-Fort Worth: Latest Lead Planning Activities](https://www.tceq.texas.gov/airquality/sip/dfw/dfw-latest-lead) Web page (<https://www.tceq.texas.gov/airquality/sip/dfw/dfw-latest-lead>).

### **1.5 SOCIAL AND ECONOMIC CONSIDERATIONS**

No new control strategies have been incorporated into this revision. Therefore, there are no additional social or economic costs associated with this revision.

### **1.6 FISCAL AND MANPOWER RESOURCES**

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

## **CHAPTER 2: REDESIGNATION REQUIREMENTS**

Section 107(d)(3)(E) of the Federal Clean Air Act (FCAA) states that an area can be redesignated to attainment if all of the following conditions are met:

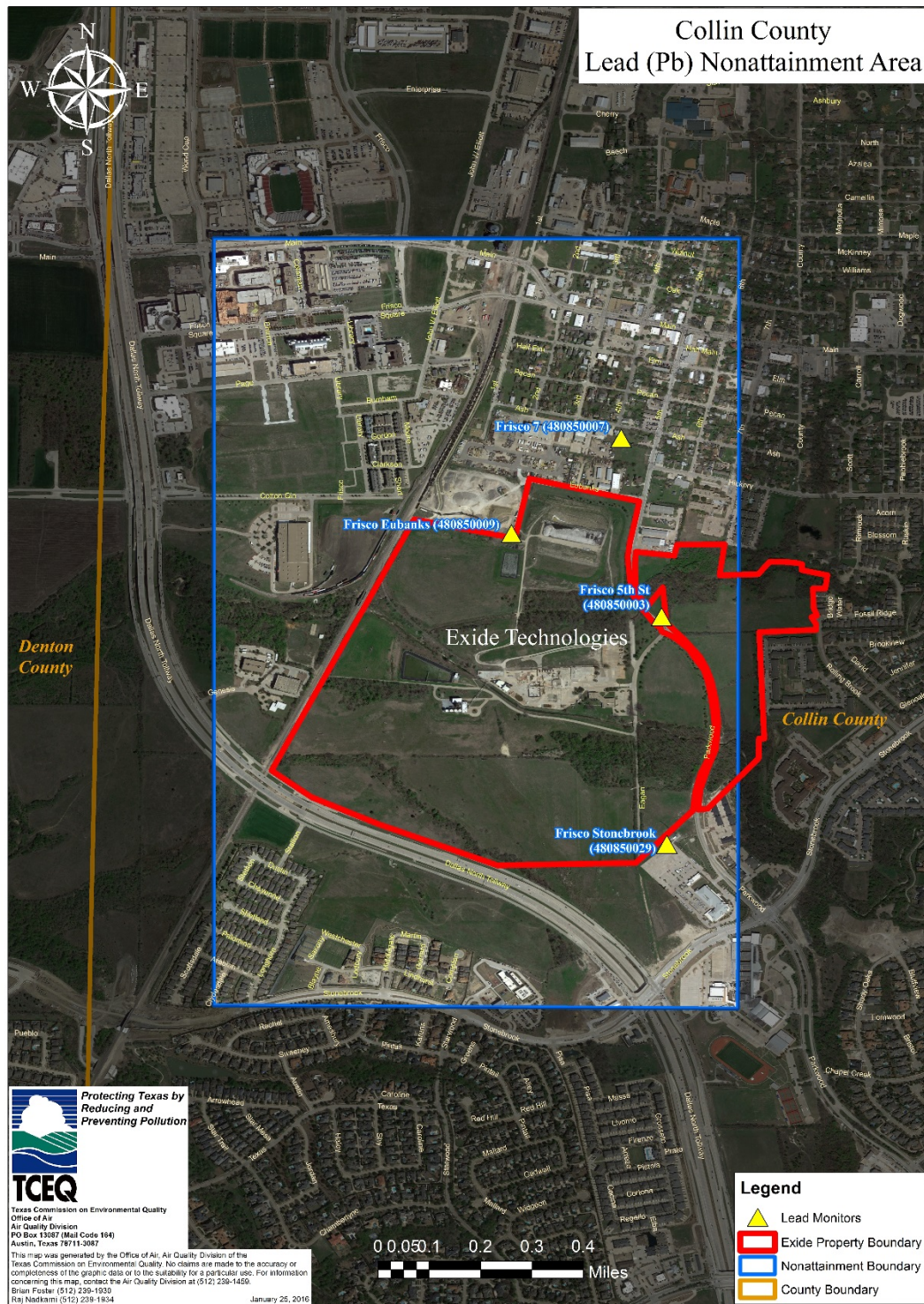
1. The Environmental Protection Agency (EPA) has determined that the National Ambient Air Quality Standards (NAAQS) have been attained.
2. The applicable implementation plan has been fully approved by the EPA under the FCAA, Section 110(k).
3. The EPA has determined that the improvement in air quality is due to permanent and enforceable reductions in emissions.
4. The EPA has fully approved a maintenance plan, including a contingency plan, for the area under Section 175A of the FCAA.
5. The state has met all applicable requirements for the area under the FCAA, Section 110 and Part D.

### **2.1 ATTAINMENT OF THE 2008 LEAD NAAQS**

#### **2.1.1 Lead Data**

The Collin County lead monitoring network consists of four regulatory lead ambient air quality monitors, two collocated lead ambient air quality monitors, and a meteorological station. The location of the four regulatory lead monitors is shown in Figure 2-1: *Map of Collin County Regulatory Lead Monitoring Locations*.

Data from these monitors are used to determine the area's compliance with the 2008 lead NAAQS. Further information regarding the Collin County ambient air monitors can be found in Chapter 5: *Monitoring Network*. Compliance with the 2008 lead NAAQS is based on 36 three-month rolling averages. According to 40 Code of Federal Regulations Part 50, Appendix R, the 2008 lead NAAQS is met at a monitoring site when the identified design value is valid and is less than or equal to 0.15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). A lead design value that meets the NAAQS is considered valid if it encompasses 36 consecutive, valid three-month site means. Between January 1, 2013 and December 31, 2015, there was not a three-month rolling average above the lead NAAQS at any of the four monitoring sites. The current design value is 0.08  $\mu\text{g}/\text{m}^3$  as of December 31, 2015. Table 2-1: *Collin County Lead Design Value Summary 2013-2015* shows the annual maximum three-month rolling averages for all four monitors for 2013-2015. Thus, the area achieved compliance of the 2008 lead NAAQS by December 31, 2015.



**Figure 2-1: Map of Collin County Regulatory Lead Monitoring Locations**



**Table 2-1: Collin County Lead Design Value Summary 2013-2015**

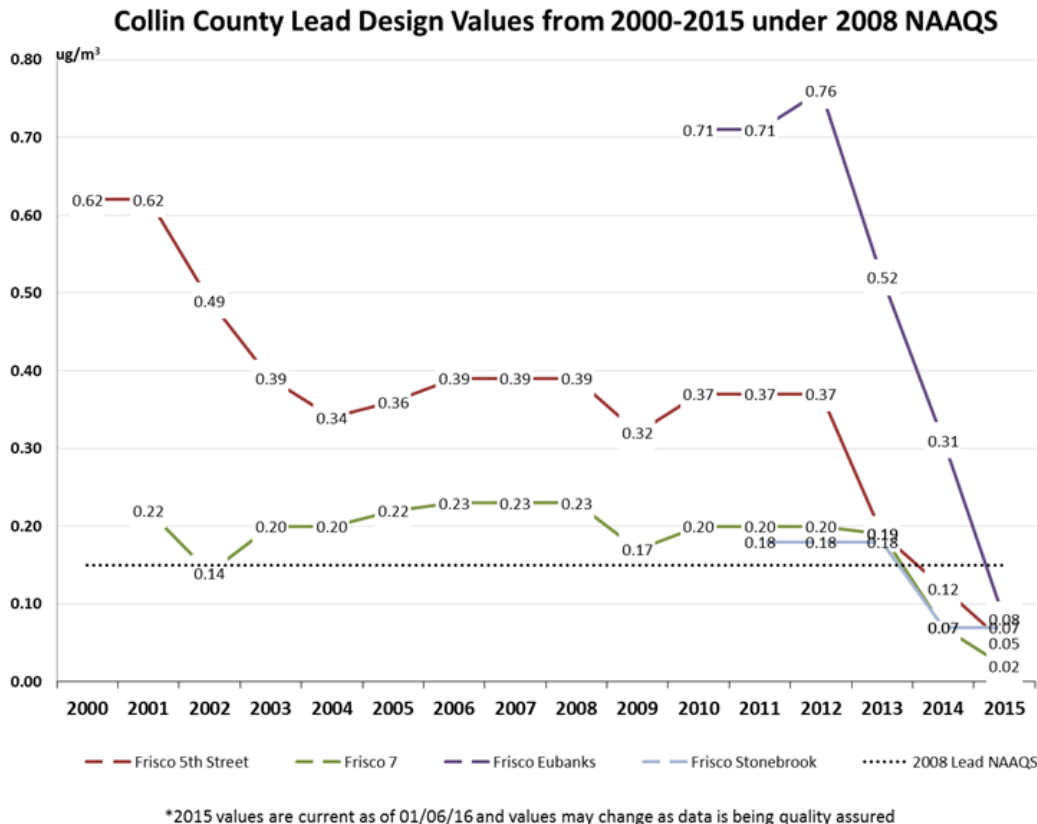
Site Identification Number	Site Name	Site address	2013 Annual Maximum Rolling Three Month Average*	2014 Annual Maximum Rolling Three Month Average*	2015 Annual Maximum Rolling Three Month Average*	Design Value 2013 – 2015*
480850003	Frisco 5th Street	7471 South 5th Street	0.05	0.01	0.01	0.05
480850007	Frisco 7	6931 Ash Street	0.02	0.02	0.00	0.02
480850009	Frisco Eubanks	6601 Eubanks	0.08	0.02	0.01	0.08
480850029	Frisco Stonebrook	7202 Stonebrook Parkway	0.07	0.01	0.01	0.07

\*Measured in  $\mu\text{g}/\text{m}^3$

Note: Data for 2013 and 2014 data have been certified by EPA and are considered final; 2015 data is considered preliminary as EPA certification is pending.

### 2.1.2 Lead Trend Analysis

Figure 2-2: *Collin County Design Value Trends 2000-2015* shows the lead design values for each of the four regulatory monitors located in the nonattainment area. To provide some additional insight into the data represented in Figure 2-2, the design value listed for each year is actually the highest design value taken over a three year period. For example, at the Frisco Eubanks monitor the listed design value for 2014 was  $0.31 \mu\text{g}/\text{m}^3$ . This is the highest design value over the 2012, 2013, and 2014 period. The  $0.31 \mu\text{g}/\text{m}^3$ , which is a three month average, actually occurred in October of 2012 and was the average of the sampling results for the months of August, September, and October 2012. As a result of Exide Technologies (Exide) permanently shutting down on November 30, 2012, the design values of the four monitors began rapidly decreasing. By the end of 2015 (years 2013, 2014, and 2015), data from all four monitoring sites are in attainment of the 2008 lead NAAQS, with a design value of  $0.08 \mu\text{g}/\text{m}^3$ .



**Figure 2-2: Collin County Design Value Trends 2000-2015**

## 2.2 SIP APPROVABILITY UNDER SECTION 110(K) OF THE FCAA

To qualify for redesignation, the state implementation plan (SIP) revision for the Collin County area must be fully approved under Section 110(k). This section of the FCAA contains the requirements for SIP completeness; deadlines; full, partial and conditional approval; and disapproval. Approval of the required SIP elements and the redesignation request may occur simultaneously.<sup>2</sup> An area cannot be redesignated if a required element of its plan is the subject of a disapproval; a finding of failure to submit or to implement the SIP; or partial, conditional, or limited approval. This does not mean that earlier issues with regard to the SIP will be reopened; the SIP must be fully approved only with respect to applicable requirements.

### 2.2.1 Section 110 General SIP Requirements

Under Section 110(a)(1) and (2) of the FCAA, states are required to submit plans to provide for the implementation, maintenance, and enforcement of any new or revised NAAQS. Section 110(a)(1) and (2) require states to address basic program elements, including requirements for emissions inventories, monitoring, and modeling. States are required to submit SIPs to the EPA that demonstrate that these basic program elements have been addressed within three years of the promulgation of any new or revised NAAQS.

<sup>2</sup> USEPA: "Procedures for Processing Requests to Redesignate Areas to Attainment" Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992.

The EPA revised the lead NAAQS on October 15, 2008, from 1.5 µg/m<sup>3</sup>, established in 1978, to a new level of 0.15 µg/m<sup>3</sup>. In order to comply with requirements under Section 110(a)(1) and (2), the Texas Commission on Environmental Quality (TCEQ) submitted the Lead Transport Plan SIP Revision (Project No. 2011-005-SIP-NR), adopted by the commission on August 17, 2011, and the Lead Infrastructure Demonstration SIP Revision (Project No. 2011-016-SIP-NR), adopted by the commission on October 5, 2011 to the EPA. The Lead Transport Plan SIP Revision and the Lead Infrastructure Demonstration SIP Revision were both approved by the EPA on January 14, 2016.

### **2.2.2 Part D Requirements**

In order for the Collin County area to be redesignated, Texas must also meet all requirements of Part D of the FCAA that were applicable prior to submittal of the redesignation request.

#### **2.2.2.1 Background**

The Collin County nonattainment area for the 2008 lead NAAQS consists of a 1.28 square mile area surrounding the dismantled Exide lead-acid battery recycling operations in Frisco, Texas. In addition to permits held by Exide for the secondary lead smelting and lead oxide operations at the lead-acid battery recycling facility, which have been voided, the TCEQ had control measures and contingency measures that were enforceable through agreed orders, which were adopted as part of the 1993 lead SIP for Collin County, the 1999 Collin County Redesignation and Maintenance Plan for Lead, and the 2009 Collin County Maintenance Plan SIP for lead.

#### **2.2.2.2 Attainment Demonstration**

In addition to previous measures to control ambient levels of lead, the Collin County Attainment Demonstration SIP Revision for the 2008 Lead NAAQS (Project No. 2011-001-SIP-NR) along with the Agreed Order associated with that SIP revision (Agreed Order 2011-0521-MIS), contained additional control measures, which demonstrated that the Collin County area would attain the 2008 lead NAAQS. In addition, the attainment demonstration SIP revision included the following required Part D elements:

- a reasonably available control technology analysis;
- a reasonably available control measures analysis;
- a demonstration of attainment through dispersion modeling;
- a reasonable further progress demonstration;
- a contingency plan; and
- an emissions inventory for the nonattainment area.

The Collin County Attainment Demonstration for the 2008 Lead NAAQS SIP Revision was adopted by the commission on August 8, 2012, and was submitted to the EPA on October 10, 2012. The EPA has not yet acted on the approval of this SIP submittal.

Instead of implementing control measures identified in the attainment demonstration SIP revision and Agreed Order for continued operation, per Exide's agreement with the City of Frisco, Exide chose the option to close the plant and cease all production activities. Effective November 1, 2012, Exide began curtailing certain recycling operations and all recycling operations ceased operation on November 30, 2012. The facility is now permanently shut down and as of August 15, 2013, decontamination and demolition of the Exide's lead recycling facility was completed. Exide voided its air permits on July 12, 2013. Soil remediation activities at the plant site and surrounding property are still being conducted.

### **2.3 SECTION 175A REQUIREMENTS FOR MAINTENANCE PLANS**

The remainder of this proposed SIP revision is intended to fulfill the maintenance plan requirements in Section 175A of the FCAA and contains the following elements:

- an attainment emissions inventory;
- a maintenance demonstration;
- verification of continued attainment;
- monitoring network verification; and
- a contingency plan.

## CHAPTER 3: ATTAINMENT EMISSIONS INVENTORY

### 3.1 INTRODUCTION

Section 107(d)(3)(E)(iii) of the Federal Clean Air Act indicates that for an area to be redesignated to attainment, the improvement in air quality must be due to permanent and enforceable reductions in emissions. Other emissions inventory related requirements include a projection of the emissions inventory to a year at least 10 years following redesignation; a demonstration that the projected level of emissions is sufficient to maintain the annual lead standard; and a commitment to provide future updates of the inventory to enable tracking of emission levels during the 10-year maintenance period.

### 3.2 POINT SOURCES

Stationary point source emissions data are collected annually from sites that meet the reporting requirements of 30 Texas Administrative Code §101.10. As part of this program, the Texas Commission on Environmental Quality (TCEQ) compiled emissions inventory data for the Collin County lead nonattainment area. The Collin County Attainment Demonstration for the 2008 Lead NAAQS relied on a 2010 emissions inventory. This lead emissions inventory for Collin County consisted of a review of the stationary source emissions from the facilities located within the nonattainment area. The only facility that produced lead emissions within the nonattainment area was Exide Technologies (Exide), which in 2010 emitted a total of 1.06 tons per year (tpy) of lead.

**Table 3-1: Collin County Lead Emissions Inventory Totals (tpy)**

Source	2010 Base	2011	2012	2013	2014	2015 Attainment
Exide	1.06	0.62	0.60	0	0	0

As shown in Table 1: *Collin County Lead Emissions Inventory Totals (tpy)*, lead emissions in the Collin County nonattainment area decreased to zero tpy by 2013 due to the permanent shutdown of the Exide facility on November 30, 2012.

## CHAPTER 4: MAINTENANCE DEMONSTRATION

### 4.1 GENERAL

The maintenance plan must demonstrate that the Collin County area will remain in attainment of the 2008 lead standard for the 10-year period following the date of redesignation to attainment. Because redesignation of the area to attainment is contingent upon the United States Environmental Protection Agency's (EPA) approval of this maintenance plan, the Texas Commission on Environmental Quality (TCEQ) has set a horizon year of 2028. Setting the horizon date at 12 years from the time that the maintenance plan must be submitted to the EPA allows adequate time for review and approval of the plan and redesignation of the Collin County area to attainment. The maintenance demonstration is satisfied if the state demonstrates that future lead emission levels are not expected to result in exceedances of the 2008 lead National Ambient Air Quality Standard.

### 4.2 FUTURE EMISSIONS AND VERIFICATION OF CONTINUED ATTAINMENT

Maintenance is demonstrated when the future-year projected emission totals measured in tons per year (tpy) in the horizon year (2028) are at or below the attainment year totals. Due to the permanent shutdown of Exide Technologies (Exide) on November 30, 2012, lead emissions in the area have been zero since 2013 and are projected to remain at zero by the horizon year of 2028. Table 4-1: *Summary of Future Collin County Lead Emissions (tpy)*, reflects this trend. Exide voided their air permits with the TCEQ on July 12, 2013 and demolition and decontamination of Exide's operating facility was completed by August 15, 2013. Therefore, stationary source operations involving lead emissions could not resume without Exide, or any other company, becoming a new source and being subject to new source review permitting requirements. This ensures maintenance of the lead standard into the future.

**Table 4-1: Summary of Future Collin County Lead Emissions (tpy)**

Source	2015 Attainment	2017	2020	2023	2026	2028 Horizon
Exide	0	0	0	0	0	0

## **CHAPTER 5: MONITORING NETWORK**

### **5.1 GENERAL**

The ambient air quality monitoring network provides data to verify continued attainment of the lead National Ambient Air Quality Standard. The Collin County lead nonattainment area monitoring network in 2015 consists of four sites, each with a regulatory ambient air lead monitor. There are also two collocated monitors and a meteorological station. The Texas Commission on Environmental Quality (TCEQ) funds and CB&I Environmental operates the monitors. The area monitoring network includes the Frisco 5<sup>th</sup> Street (Air Quality System site identification number (AQS) 480850003), Frisco 7 (AQS 480850007) plus a collocated monitor, Frisco Eubanks (AQS 480850009) plus a collocated monitor and a meteorological station, and Frisco Stonebrook (AQS 480850029) sites. The Frisco Eubanks monitor is the monitor historically driving the area's design value.

The monitors are managed in accordance with 40 Code of Federal Regulations (CFR) Part 58 to verify the attainment status of the area. The TCEQ commits to keep in operation an appropriate air monitoring network in the Collin County area and will continue to work with the United States Environmental Protection Agency (EPA) through the air monitoring network review process, as required by 40 CFR Part 58, to determine the adequacy of the lead monitoring network and when monitoring can be discontinued. Air monitoring data from the monitoring network will continue to be quality assured according to the requirements in the EPA's regulations until the end of the maintenance period (2028) and reported to the EPA on the schedule required by 40 CFR Part 58. Appendix B: *Monitoring Data from Collin County Lead Monitors* describes available monitoring data in Collin County for the years 2013 through 2015.

## **CHAPTER 6: CONTINGENCY PLAN**

### **6.1 BACKGROUND**

Section 175A(d) of the Federal Clean Air Act requires that maintenance plans include contingency provisions to promptly correct any violation of the National Ambient Air Quality Standard (NAAQS). The contingency plan ensures that the contingency measures are adopted expeditiously if they are triggered. In accordance with United States Environmental Protection Agency (EPA) guidance, a trigger has been established in order to effectuate appropriate and timely responses to indications of a possible future violation of the NAAQS. Thus, actions may be taken that can avoid a violation and potential redesignation to nonattainment.

### **6.2 CONTINGENCY MEASURES AND TRIGGER LEVELS**

Since Exide Technologies has permanently shut down, with all of the lead recycling facilities having been removed from the site, no future air emissions of lead are anticipated to occur. Therefore, the identification of specific detailed measures is not practical. However, the TCEQ commits to adopt and expeditiously implement necessary corrective actions in the following circumstances.

#### **6.2.1 Warning Level Response**

A warning level response will be prompted whenever a three-month rolling average concentration of 0.135 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) of lead, (which is 90% of the standard) occurs at any of the ambient monitoring sites in the Collin County lead nonattainment area monitoring network. A warning level response will consist of a study to determine whether the lead design value indicates a trend toward higher design values. The study will evaluate whether the trend, if any, is likely to continue and, if so, the measures necessary to reverse the trend taking into consideration ease and timing for implementation as well as economic and social considerations. Implementation of necessary measures in response to a warning level response trigger will take place as expeditiously as possible, but no later than 12 months from the conclusion of the most recent calendar year.

Should it be determined through the warning level study that action is necessary to reverse the noted trend, the procedures for measure selection and implementation outlined under “action level response” will be followed.

#### **6.2.2 Action Level Response**

An action level response will be prompted whenever a two-year average of the three-month rolling average concentration of 0.143  $\mu\text{g}/\text{m}^3$  of lead (which is 95% of the standard) or greater occurs at any of the ambient monitoring sites in the Collin County lead nonattainment area monitoring network. A violation of the standard (any three-month rolling average that exceeds 0.15  $\mu\text{g}/\text{m}^3$ ) will also prompt an action level response. In the event that the action level is triggered and is not found to be due to an exceptional event, malfunction, or noncompliance with a permit condition (if a permit exists), or rule requirement, the TCEQ, in conjunction with the entity/entities believed to be responsible for the exceedance, will evaluate additional measures needed to assure future attainment of the lead NAAQS. In this case, measures that can be implemented in a short time will be selected in order for the measures to be in place within 18 months from the close of the calendar year that prompted the action level. The TCEQ will also consider the timing of an action level trigger and determine if additional, significant new regulations not currently included as part of the maintenance provisions will be implemented in a timely manner and will constitute the TCEQ's response.



### **6.2.3 Control Measure Selection and Implementation**

Adoption of any additional control measures into the Texas state implementation plan is subject to the administrative and legal processes required by state and federal law. This process would include publication of notices, an opportunity for public hearing, and other measures required by Texas law for rulemaking or permitting.

If a new measure/control is already promulgated and scheduled to be implemented at the federal or state level, and that measure/control is determined to be sufficient to address the upward trend in air quality, additional local measures may be unnecessary. Furthermore, the TCEQ will submit to the EPA an analysis to demonstrate the proposed measures are adequate to return the area to attainment.

*Appendices Available Upon Request*

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