AGENDA REQUESTED:  April 4, 2018

DATE OF REQUEST:  March 16, 2018

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

CAPTION:  Docket No. 2018-0040-SIP.  Consideration for publication of and hearing on, the proposed Dallas-Fort Worth (DFW) 2008 Eight-Hour Ozone Standard Nonattainment Area Reasonably Available Control Technology (RACT) Update State Implementation Plan (SIP) Revision.

The proposed SIP revision would address the United States Environmental Protection Agency’s final conditional approval of RACT for nitrogen oxides for the DFW 2008 eight-hour ozone standard nonattainment area through a voluntary Agreed Order with TXI Operations, LP., if it is adopted by the commission. (Kathy Singleton, Terry Salem) (Non-rule Project No. 2017-001-SIP-NR)

Steve Hagle, P.E.  David Brymer
Deputy Director  Division Director

Joyce Nelson
Agenda Coordinator

Copy to CCC Secretary?  NO  YES
Background and reason(s) for the SIP Revision:
The Federal Clean Air Act (FCAA) requires states to submit plans to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS) for nonattainment areas within the state. On May 1, 2012, the 10-county DFW area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, was designated a moderate nonattainment area for the 2008 eight-hour ozone standard.

On July 10, 2015, the Texas Commission on Environmental Quality (TCEQ) submitted a SIP revision that included RACT determinations for sources in the DFW 2008 ozone nonattainment area. After the submittal, in discussions with TCEQ staff, the United States Environmental Protection Agency (EPA) Region 6 stated it could not approve the TCEQ's nitrogen oxides (NOx) RACT determination for Kiln No. 5 at the TXI Operations, LP, (TXI) Portland cement kiln facility located in Ellis County. However, EPA Region 6 indicated that if the TCEQ acted to make the 1.95 pounds (lb) of NOx per ton of clinker emission limit contained in TXI's new source review permit (Permit No. 1360A) directly enforceable via an enforceable mechanism such as a voluntary agreed order or rule, it could be considered by the EPA as satisfying RACT.

The TCEQ submitted a letter to the EPA on July 29, 2016 stating that, if adopted by the commission, the TCEQ commits to submit an updated DFW RACT SIP revision by no later than one year from the effective date of final conditional approval to address NOx RACT for TXI Kiln No. 5. On September 22, 2017, the EPA published final conditional approval of the NOx RACT for the DFW 2008 Eight-Hour ozone standard nonattainment area (82 FR 33026), based on this commitment. The effective date of the EPA's final conditional approval was October 23, 2017.

Scope of the proposed SIP revision:
A.) Summary of what the SIP revision will do:
This memo applies to the DFW 2008 Eight-Hour Ozone Standard Nonattainment Area RACT Update SIP Revision, which would be proposed and adopted in conjunction with Agreed Order No. 2017-1648-SIP (Project No. 2018-010-SIP-NR), the details of which are covered in a separate memo.
The proposed DFW Updated RACT SIP Revision would address the EPA’s final conditional approval of RACT for NO\textsubscript{x} for the DFW 2008 eight-hour ozone standard nonattainment area through an agreed order with TXI. The Agreed Order No. 2017-1648-SIP incorporates certain permit conditions for the TXI Portland cement manufacturing plant in Ellis County to limit NO\textsubscript{x} emissions to 1.95 lb of NO\textsubscript{x} per ton of clinker from Kiln No. 5 to make that limit federally enforceable as NO\textsubscript{x} RACT. If adopted by the commission, the TCEQ would submit the voluntary agreed order and the updated DFW RACT SIP revision to the EPA by no later than October 23, 2018.

B.) Scope required by federal regulations or state statutes:
The SIP revision is necessary to satisfy the EPA’s interpretation of FCAA, §172 and §182 requirements for RACT. The TCEQ proposes the SIP revision and the accompanying voluntary agreed order for the purpose of establishing the state and federally enforceable applicable NO\textsubscript{x} emission limit for Kiln No. 5 located at the TXI site in Midlothian, Ellis County, Texas that will meet the requirements of the FCAA for NO\textsubscript{x} RACT.

C.) Additional staff recommendations that are not required by federal rule or state statute:
Staff recommends including an explanation in the DFW RACT Update SIP Revision as to how Texas meets FCAA, §182 requirements for emissions statements and the EPA’s Guidance on the Implementation of an Emission Statement Program (July 1992). This information has not been included in a previous DFW SIP revision for the 2008 ozone standard, and the EPA has requested that the TCEQ document how Texas meets this requirement in the SIP.

Statutory authority:
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 achieve 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:
The 1.95 lb of NO\textsubscript{x} per ton of clinker emission limit contained in TXI’s NSR permit (Permit No. 1360A) would be made directly enforceable under the SIP via a voluntary agreed order that would be submitted to the EPA concurrent with this SIP revision. TXI is already complying with the permitted emission limit, and no additional controls or costs are expected to be necessary to comply with a voluntary agreed order to make the limit enforceable under the SIP.

B.) Public:
None
Re: Docket No. 2018-0040-SIP

C.) Agency programs:
No impact on agency programs is anticipated. If a SIP revision is not submitted addressing RACT for the TXI Kiln No. 5 then the EPA has indicated that it will disapprove the TCEQ's RACT determination for TXI Kiln No. 5.

Stakeholder meetings:
TCEQ staff have reached out to TXI representatives to discuss this issue. If the proposed DFW RACT Update SIP Revision is approved by the commission for public comment and public hearing, then a formal public comment period would be opened and a public hearing would be held.

Potential controversial concerns and legislative interest:
Historically, environmental groups have contended that RACT for cement kilns in this area should be a control level based on the installation of selective catalytic reduction NOX control technology.

What are the consequences if this SIP revision does not go forward? Are there alternatives to this SIP revision?
The TCEQ could choose not to proceed with the RACT update, which would result in a disapproval of NOX RACT for the DFW area by the EPA of the NOX RACT determination, submitted to the EPA on July 10, 2015, for the TXI Portland cement kiln facility Kiln No. 5, located in Ellis County. Disapproval of RACT for the site could result in the EPA issuing a federal implementation plan to implement RACT for TXI and potentially federal highway sanctions against the state.

Key points in the proposal SIP revision schedule:
- **Anticipated proposal date:** April 4, 2018
- **Anticipated public hearing date:** May 10, 2018 in Arlington, Texas
- **Anticipated public comment period:** April 6, 2018 through May 11, 2018
- **Anticipated adoption date:** September 26, 2018

Agency contacts:
Kathy Singleton, SIP Project Manager, Air Quality Division, (512) 239-0703
Terry Salem, Staff Attorney, (512) 239-0469
Joyce Spencer-Nelson, Agenda Coordinator, (512) 239-5017

cc: Chief Clerk, 2 copies
Executive Director’s Office
Erin Chancellor
Stephen Tatum
Jim Rizk
Office of General Counsel
Kathy Singleton
Joyce Spencer-Nelson
REVISIONS TO THE STATE OF TEXAS AIR QUALITY IMPLEMENTATION PLAN FOR THE CONTROL OF OZONE AIR POLLUTION

DALLAS-FORT WORTH EIGHT-HOUR OZONE NONATTAINMENT AREA

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

DALLAS-FORT WORTH 2008 EIGHT-HOUR OZONE STANDARD NONATTAINMENT AREA REASONABLY AVAILABLE CONTROL TECHNOLOGY UPDATE STATE IMPLEMENTATION PLAN REVISION

PROJECT NUMBER 2017-001-SIP-NR

Proposal
April 4, 2018
EXECUTIVE SUMMARY

On March 12, 2008, the United States Environmental Protection Agency (EPA) changed the eight-hour ozone standard from 0.08 parts per million (ppm) to 0.075 ppm. Under the 0.075 ppm (75 parts per billion) standard, the EPA designated Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties as nonattainment with a moderate classification, effective July 20, 2012. These 10 counties form the Dallas-Fort Worth (DFW) 2008 eight-hour ozone standard moderate nonattainment area.

On December 23, 2014, the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) issued an opinion in a lawsuit which resulted in vacatur of the EPA’s December 31, 2018 attainment date for the 2008 ozone NAAQS. As a result of the court case, the attainment date for the DFW moderate nonattainment area was changed to July 20, 2018 with a 2017 attainment year (80 FR 12264).

The Dallas-Fort Worth Attainment Demonstration State Implementation Plan Revision for the 2008 Eight-Hour Ozone Standard Nonattainment Area (2018 DFW AD SIP revision), submitted to the EPA on July 10, 2015, included Reasonably Available Control Technology (RACT) determinations for sources in the DFW 2008 ozone nonattainment area. After the submittal, in discussions with Texas Commission on Environmental Quality (TCEQ) staff, EPA Region 6 stated it could not approve the TCEQ’s nitrogen oxides (NOX) RACT determination for Kiln No. 5 at the TXI Operations, LP (TXI) Portland cement kiln facility located in Ellis County. However, EPA Region 6 indicated that if the TCEQ acted to make the 1.95 pounds (lb) of NOX per ton of clinker emission limit contained in TXI's new source review (NSR) permit (Permit No. 1360A) directly enforceable under the SIP via an enforceable mechanism such as a voluntary agreed order, it could be considered by the EPA as satisfying RACT.

The TCEQ submitted a letter to the EPA on July 29, 2016 stating that, if adopted by the commission, the TCEQ commits to submit an updated DFW RACT SIP revision by no later than one year from the effective date of final conditional approval to address NOX RACT for TXI Kiln No. 5. On September 22, 2017, the EPA published final conditional approval of the NOX RACT for the DFW 2008 ozone standard nonattainment area (82 FR 33026), based on this commitment. The effective date of EPA’s final conditional approval was October 23, 2017. This proposed DFW SIP revision is necessary to satisfy the EPA’s approval of an updated DFW RACT SIP revision enforceable through a proposed voluntary Agreed Order No. 2017-1648-SIP that incorporates certain permit conditions for the TXI Portland cement manufacturing plant in Ellis County to limit NOX emissions from Kiln No. 5 to 1.95 lb of NOX per ton of clinker. If adopted by the commission, the TCEQ would submit this SIP revision and the adopted voluntary agreed order to the EPA by no later than October 23, 2018.

This proposed SIP revision also includes an explanation as to how Texas meets Federal Clean Air Act (FCAA), §182 requirements for emissions statements and the EPA’s Guidance on the Implementation of an Emission Statement Program (July 1992). This information has not been included in a previous DFW SIP revision for the 2008 ozone standard.
Because this proposed DFW RACT Update SIP revision only provides an update to the RACT analyses and an explanation as to how Texas meets FCAA, §182 requirements for emissions statements, all other sections have been labeled “no change.” An electronic version of the 2018 DFW AD SIP revision for the 2008 ozone NAAQS submitted to the EPA on July 10, 2015 can be found at the TCEQ's Dallas-Fort Worth: Latest Ozone Planning Activities webpage (https://www.tceq.texas.gov/airquality/sip/dfw/dfw-latest-ozone).
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.


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.

**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, 2017
- **TEXAS WATER CODE** September 1, 2017

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 29, 2016

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
   October 12, 2017

Chapter 106: Permits by Rule, Subchapter A
   April 17, 2014

Chapter 111: Control of Air Pollution from Visible Emissions and Particulate Matter
   August 3, 2017

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
   December 29, 2016

Chapter 115: Control of Air Pollution from Volatile Organic Compounds
   June 25, 2015

Chapter 116: Permits for New Construction or Modification
   November 24, 2016

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
   February 23, 2017
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<th>Chapter 122: §122.215: Minor Permit Revisions</th>
<th>June 3, 2001</th>
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<td>Chapter 122: §122.216: Applications for Minor Permit Revisions</td>
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<td>Chapter 122: §122.218: Minor Permit Revision Procedures for Permit Revisions Involving the Use of Economic Incentives, Marketable Permits, and Emissions Trading</td>
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B. Ozone (Revised)
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      Chapter 2: Emissions Inventories (No change)
      Chapter 3: Progress Toward Meeting Target Emissions Levels (No change)
      Chapter 4: Control Measures to Achieve Target Emissions Levels
      Chapter 5: Motor Vehicle Emissions Budget (No change)
      Chapter 6: Ongoing Initiatives (No change)
   2. Houston-Galveston-Brazoria (No change)
   3. Beaumont-Port Arthur (No change)
   4. El Paso (No change)
   5. Regional Strategies (No change)
   6. Northeast Texas (No change)
   7. Austin Area (No change)
   8. San Antonio Area (No change)
   9. Victoria Area (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)
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J. Mobile Sources Strategies (No change)
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    1.2.2 1997 Eight-Hour Ozone NAAQS History (No Change)
    1.2.3 2008 Eight-Hour Ozone NAAQS (No Change)
    1.2.4 AD SIP Revision for the 2008 Ozone NAAQS (No Change)
    1.2.5 AD SIP Revision for 2008 Ozone NAAQS for the 2017 Attainment Year (No Change)
    1.2.6 DFW RACT Update SIP Revision
    1.2.7 Existing Ozone Control Strategies (No Change)
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4.10 Emission Statement Program
4.11 References (No Change)

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Chapter 6: Ongoing Initiatives (No Change)
## LIST OF ACRONYMS

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<td>ACT</td>
<td>alternative control techniques</td>
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<td>AD</td>
<td>attainment demonstration</td>
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<td>BACT</td>
<td>best available control technology</td>
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<td>CTG</td>
<td>control techniques guidelines</td>
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<td>DFW</td>
<td>Dallas-Fort Worth</td>
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<td>EPA</td>
<td>United States Environmental Protection Agency</td>
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<td>FCAA</td>
<td>Federal Clean Air Act</td>
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<td>MACT</td>
<td>maximum achievable control technology</td>
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<td>National Ambient Air Quality Standard</td>
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<td>Texas Clean Air Act</td>
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<td>VOC</td>
<td>volatile organic compounds</td>
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CHAPTER 1: GENERAL

1.1 BACKGROUND (NO CHANGE)

1.2 INTRODUCTION (NO CHANGE)

1.2.1 One-Hour National Ambient Air Quality Standard (NAAQS) History (No Change)

1.2.2 1997 Eight-Hour Ozone NAAQS History (No Change)

1.2.3 2008 Eight-Hour Ozone NAAQS (No Change)

1.2.4 AD SIP Revision for the 2008 Ozone NAAQS (No Change)

1.2.5 AD SIP Revision for 2008 Ozone NAAQS for the 2017 Attainment Year (No Change)

1.2.6 DFW RACT Update SIP Revision

On July 10, 2015, the Texas Commission on Environmental Quality (TCEQ) submitted a state implementation plan (SIP) revision that included reasonably available control technology (RACT) determinations for sources in the DFW 2008 ozone nonattainment area. After the submittal, in discussions with TCEQ staff, the United States Environmental Protection Agency (EPA) Region 6 stated they could not approve the TCEQ's nitrogen oxides (NOx) RACT determination for Kiln No. 5 at the TXI Operations, LP (TXI) Portland cement kiln facility located in Ellis County. However, EPA Region 6 indicated that if the TCEQ acted to make the 1.95 pounds (lb) of NOx per ton of clinker emission limit contained in TXI's new source review (NSR) permit (Permit No. 1360A) directly enforceable under the SIP via an enforceable mechanism such as a voluntary agreed order or rule, it could be considered by the EPA as satisfying RACT.

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This proposed SIP revision would satisfy the EPA's conditional approval of NOx RACT for the DFW 2008 ozone nonattainment area through voluntary Agreed Order No. 2017-1648-SIP that incorporates certain permit conditions for the TXI cement manufacturing plant in Ellis County to limit NOx emissions for Kiln No. 5 to 1.95 lb of NOx per ton of clinker. If adopted by the commission, the TCEQ would submit a DFW RACT Update SIP revision to the EPA by no later than October 23, 2018.

1.2.7 Existing Ozone Control Strategies (No Change)

1.3 HEALTH EFFECTS (NO CHANGE)

1.4 STAKEHOLDER PARTICIPATION (NO CHANGE)
1.5 PUBLIC HEARING INFORMATION
The commission will hold a public hearing on this proposed DFW RACT Update SIP Revision at the following time and location:

Table 1-1: Public Hearing Information

<table>
<thead>
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<th>City</th>
<th>Date</th>
<th>Time</th>
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<td>Arlington</td>
<td>May 10, 2018</td>
<td>2:00 P.M.</td>
<td>Arlington City Council Chambers 101 W. Abram St. Arlington, TX 76010</td>
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</table>

The public comment period will open on April 6, 2018, and close on May 11, 2018. Written comments will be accepted via mail, fax, or through the eComments (http://www1.tceq.texas.gov/rules/ecomments/index.cfm) system. All comments should reference the “Dallas-Fort Worth (DFW) 2008 Eight-Hour Ozone Standard Nonattainment Area Reasonably Available Control Technology (RACT) Update SIP Revision” and should reference Project Number 2017-001-SIP-NR. Comments may be submitted to Kathy Singleton, MC 206, State Implementation Plan Team, Air Quality Division, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-6188. If you choose to submit electronic comments, they must be submitted through the eComments system. File size restrictions may apply to comments being submitted via the eComments system. Comments must be received by May 11, 2018.

An electronic version of the DFW RACT Update SIP Revision and appendices can be found at the TCEQ’s [Dallas-Fort Worth: Latest Ozone Planning Activities](https://www.tceq.texas.gov/airquality/sip/dfw/dfw-latest-ozone) webpage.

1.6 SOCIAL AND ECONOMIC CONSIDERATIONS (NO CHANGE)

1.7 FISCAL AND MANPOWER RESOURCES (NO CHANGE)
CHAPTER 2: ANTHROPOGENIC EMISSIONS INVENTORY (EI) DESCRIPTION (NO CHANGE)
CHAPTER 3: PHOTOCHEMICAL MODELING (NO CHANGE)
CHAPTER 4: CONTROL STRATEGIES AND REQUIRED ELEMENTS

4.1 INTRODUCTION (NO CHANGE)

4.2 EXISTING CONTROL MEASURES (NO CHANGE)

4.3 UPDATES TO EXISTING CONTROL MEASURES (NO CHANGE)

4.4 NEW CONTROL MEASURES (NO CHANGE)

4.5 RACT ANALYSIS

4.5.1 General Discussion

Nonattainment areas classified as moderate and above are required to meet the mandates of the Federal Clean Air Act (FCAA) under §172(c)(1) and §182(b)(2) and (f). According to the United States Environmental Protection Agency’s (EPA) 2008 eight-hour ozone state implementation plan (SIP) requirements rule (80 Federal Register (FR) 12264), states containing areas classified as moderate ozone nonattainment or higher must submit a SIP revision to fulfill the reasonably available control technology (RACT) requirements for all control techniques guidelines (CTG) emission source categories and all non-CTG major sources of nitrogen oxides (NOx) and volatile organic compounds (VOC), and this SIP revision must contain adopted RACT regulations, certifications where appropriate that existing provisions are RACT, and/or negative declarations that there are no sources in the nonattainment area covered by a specific CTG source category. The major source threshold for moderate ozone nonattainment areas is a potential to emit 100 tons per year (tpy) or more of either NOx or VOC. The 100 tpy major source threshold applies in Wise County. A 50 tpy major source threshold is retained for the remaining nine counties, which were classified as a serious nonattainment area under the 1997 eight-hour ozone National Ambient Air Quality Standard (NAAQS). On November 8, 2016, the EPA published its final approval of the Dallas-Fort Worth (DFW) area redesignation substitute for the one-hour ozone and 1997 eight-hour ozone NAAQS (81 FR 78688). The effective date of the rule was December 8, 2016.

RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762, September 17, 1979). RACT requirements for moderate and higher classification ozone nonattainment areas are included in the FCAA to assure that significant source categories at major sources of ozone precursor emissions are controlled to a reasonable extent, but not necessarily to best available control technology (BACT) levels expected of new sources or to maximum achievable control technology (MACT) levels required for major sources of hazardous air pollutants.

While RACT and reasonably available control measures (RACM) have similar consideration factors like technological and economic feasibility, there is a significant distinction between RACT and RACM. A control measure must advance attainment of the area towards the meeting the NAAQS for that measure to be considered RACM. Advancing attainment of the area is not a factor of consideration when evaluating RACT because the benefit of implementing RACT is presumed under the FCAA.
In 2008, the EPA approved the DFW NO\textsubscript{x} rules in 30 Texas Administrative Code (TAC) Chapter 117 (73 FR 73562). In 2009, the EPA approved the DFW VOC rules in 30 TAC Chapter 115 and NO\textsubscript{x} rules for cement kilns in 30 TAC Chapter 117 as meeting the FCAA RACT requirements (74 FR 1903 and 74 FR 1927). In 2014, the EPA approved the 30 TAC Chapter 115 rules for VOC storage tanks as meeting the FCAA RACT requirements (79 FR 53299). State regulations in Chapter 115 that implement the controls recommended in CTG or alternative control techniques (ACT) documents or that implement equivalent or superior emission control strategies were determined to fulfill RACT requirements for any CTG or ACT documents issued prior to 2006 for the nine-county DFW 1997 eight-hour ozone nonattainment area.

The EPA issued 11 CTG documents between 2006 and 2008 with recommendations for VOC controls on a variety of consumer and commercial products. The RACT analysis included in the DFW Attainment Demonstration (AD) SIP revision for the 1997 Eight-Hour Ozone Standard adopted on March 10, 2010 addressed the following three CTG documents:

- Flat Wood Paneling Coatings, Group II issued in 2006;
- Offset Lithographic and Letterpress Printing, Group II issued in 2006; and

The RACT analysis included in the DFW AD SIP Revision for the 1997 Eight-Hour Ozone Standard adopted on December 7, 2011 addressed the remaining eight CTG documents:

- Flexible Packaging Printing Materials, Group II issued in 2006;
- Industrial Cleaning Solvents, Group II issued in 2006;
- Large Appliance Coatings, Group III issued in 2007;
- Metal Furniture Coatings, Group III issued in 2007;
- Paper, Film, and Foil Coatings, Group III issued in 2007;
- Miscellaneous Industrial Adhesives, Group IV issued in 2008;
- Miscellaneous Metal and Plastic Parts Coatings, Group IV issued in 2008; and
- Auto and Light-Duty Truck Assembly Coatings, Group IV issued in 2008.

In 2014, the EPA approved the 30 TAC Chapter 115 rules for offset lithographic printing as meeting the FCAA RACT requirements (79 FR 45105). In 2015, the EPA approved the DFW VOC rules in 30 TAC Chapter 115 addressing the remaining CTGs issued between 2006 and 2008, in addition to approving the DFW RACT analysis as meeting the FCAA RACT requirements for all affected VOC and NO\textsubscript{x} sources under the 1997 eight-hour ozone NAAQS (80 FR 16291).

TCEQ rules that are consistent with or more stringent than controls implemented in other ozone nonattainment areas were also determined to fulfill RACT requirements. Federally approved state rules and rule approval dates can be found in 40 Code of Federal Regulations §52.2270(c), EPA Approved Regulations in the Texas SIP. Emission sources subject to the more stringent BACT or MACT requirements were determined to also fulfill RACT requirements.

The Texas Commission on Environmental Quality (TCEQ) reviewed the emission sources in the DFW ozone nonattainment area and the applicable TCEQ rules to verify
that all CTG or ACT emission source categories and non-CTG or non-ACT major emission sources in the DFW ozone nonattainment area were subject to requirements that meet or exceed the applicable RACT requirements, or that further emission controls on the sources were either not economically feasible or not technologically feasible. Additional detail can be found in Appendix F: RACT Analysis of this DFW RACT Update SIP revision.

On September 22, 2017, the EPA published its conditional approval of revisions to the Texas SIP for NO\textsubscript{x} RACT for the TXI Operations, LP (TXI) cement manufacturing plant in Ellis County, and full approval of revisions addressing NO\textsubscript{x} RACT for all other affected sources in the DFW 2008 eight-hour ozone nonattainment area (82 FR 44320). On December 21, 2017, the EPA published its final approval of VOC RACT and negative declarations for the DFW 2008 eight-hour ozone standard nonattainment area (82 FR 60546).

4.5.2 NO\textsubscript{x} RACT Determination
The Chapter 117 rules represent one of the most comprehensive NO\textsubscript{x} control strategies in the nation. The NO\textsubscript{x} controls and reductions implemented through Chapter 117 for the ten-county DFW ozone nonattainment area encompass both RACT and beyond-RACT levels of control for the 2008 eight-hour ozone standard. The current EPA-approved Chapter 117 rules continue to fulfill RACT requirements for the 2008 eight-hour ozone standard for ACT NO\textsubscript{x} source categories that exist in the DFW nonattainment area under the 2008 eight-hour ozone NAAQS. As part of the DFW 2008 Eight-Hour Ozone NAAQS AD SIP revision, the TCEQ conducted its RACT analysis for NO\textsubscript{x} major sources. The Chapter 117 rules are not being affected by this proposed RACT analysis update and the Chapter 117 rules regarding cement kilns continue to apply to the TXI Portland cement manufacturing plant in Ellis County. However, RACT for the TXI Cement Kiln No. 5 is fulfilled by the concurrently proposed voluntary Agreed Order (Non-Rule Project No. 2018-010-SIP-NR) rather than the Chapter 117 rules.

For major NO\textsubscript{x} emission sources for which NO\textsubscript{x} controls are technologically and economically feasible, RACT is fulfilled by existing source-specific rules in Chapter 117, and other federally enforceable measures. Additional NO\textsubscript{x} controls on certain major sources were determined to be either not economically feasible or not technologically feasible. Table F-4: State Rules Addressing NO\textsubscript{x} RACT Requirements for Major Emission Sources in the Nine-County DFW Area in Appendix F provides additional detail on the major emission sources, and has been updated to include the proposed voluntary agreed order as part of the analysis for TXI.

4.5.2.1 Wise County Major Sources (No Change)
4.5.2.2 Wood Fired Boilers (No Change)
4.5.2.3 Cement Kilns
The cement kilns located in Ellis County are subject to the requirements of Chapter 117, Subchapter E, Division 2, and in 2009, the EPA approved these rules as meeting the FCAA RACT requirements for these sources for the 1997 eight-hour ozone NAAQS (74 FR 1927). Three companies currently operate four kilns in Ellis County: Ash Grove Cement Company, Holcim U.S., Inc, and TXI. On September 22, 2017, the EPA published
conditional approval of revisions to the NOx RACT for the TXI Portland cement manufacturing plant in Ellis County, and full approval of revisions addressing the NOx RACT for all other affected sources in the DFW 2008 eight-hour ozone nonattainment area (82 FR 44320). For Ash Grove, RACT is fulfilled with the 1.5 pounds (lb) of NOx per ton of clinker emission standards in the New Source Performance Standards for Portland Cement Plants. For Holcim, the current §117.3123 source cap of 5.3 tpd NOx fulfills RACT, as previously approved by the EPA. For TXI, the conditional approval is based on a commitment to submit specific enforceable measures (i.e., an agreed order or rule) that incorporate certain permit conditions for the TXI cement manufacturing plant to limit NOx emissions to 1.95 lb of NOx per ton of clinker.

In response to the EPA’s conditional approval of NOx RACT for TXI, the permitted emission limit of 1.95 lb of NOx per ton of clinker is proposed as RACT in this SIP revision and would be enforceable through the concurrently proposed voluntary agreed order between the TCEQ and TXI (see Appendix I: Agreed Order). The voluntary agreed order would also establish the monitoring, recordkeeping, and averaging time requirements for demonstrating compliance with the 1.95 lb of NOx per ton of clinker limit.

4.6 RACM ANALYSIS (NO CHANGE)

4.7 MVEB (NO CHANGE)

4.8 MONITORING NETWORK (NO CHANGE)

4.9 CONTINGENCY PLAN (NO CHANGE)

4.10 EMISSION STATEMENT PROGRAM

On August 26, 1994, the EPA published proposed approval and a direct final approval of a revision to the Texas SIP that included revisions to 30 TAC §101.10: Emissions Inventory Requirements and implemented an emission statement program for stationary sources within ozone nonattainment areas (59 FR 44036). The effective date for the direct final approval was October 25, 1994. Approval of this DFW RACT Update SIP Revision satisfies FCAA, §182 requirements and EPA’s Guidance on the Implementation of an Emission Statement Program (July 1992).

4.11 REFERENCES (NO CHANGE)
CHAPTER 5: WEIGHT OF EVIDENCE (NO CHANGE)
Appendices available upon request.

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