

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** November 21, 2014

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.: 2014-0707-RUL

Subject: Commission Approval for Proposed Rulemaking
Chapter 117, Control of Air Pollution from Nitrogen Compounds
NO_x RACT Rules for the DFW 2008 Eight-Hour Ozone Nonattainment
Area
Rule Project No. 2013-049-117-AI

Background and reason(s) for the rulemaking:

Under the 2008 eight-hour ozone National Ambient Air Quality Standard (NAAQS), the Dallas-Fort Worth (DFW) 2008 eight-hour ozone nonattainment area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, is classified as a moderate nonattainment area with a December 31, 2018 attainment deadline (77 FR 30088, May 21, 2012). 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(f). FCAA, §172(c)(1) requires that the state implementation plan (SIP) incorporate all reasonably available control measures, including reasonably available control technology (RACT), for sources of relevant pollutants. FCAA, §182(f) requires the state to submit a SIP revision that implements RACT for all major sources of nitrogen oxides (NO_x).

The United States Environmental Protection Agency (EPA) defines RACT as the lowest emission 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 53761, September 17, 1979). The FCAA requires the state to implement RACT, while EPA guidance provides states with the flexibility to determine the most technologically and economically feasible RACT requirements for a nonattainment area. The proposed rulemaking would revise Chapter 117 to implement RACT for all major sources of NO_x in the DFW area as required by FCAA, §172(c)(1) and §182(f). The state previously adopted 30 Texas Administrative Code Chapter 117 RACT rules for sources in the DFW area as part of the SIP for the 1997 eight-hour ozone standard; this did not include Wise County. This rulemaking would implement RACT for major sources of NO_x located in newly designated Wise County and for major sources of NO_x in the other nine counties of the DFW 2008 eight-hour ozone nonattainment area that are not addressed by the current Chapter 117 rules. However, the TCEQ and other concerned parties are currently challenging whether the EPA's inclusion of Wise County in the DFW 2008 eight-hour ozone nonattainment area was lawful. These challenges are currently pending in the United States Court of Appeals for the District of Columbia Circuit. If the inclusion of Wise County in the DFW 2008 eight-hour ozone nonattainment area is overturned, the TCEQ

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will take action to revise this rulemaking appropriately. If adopted, the rule would be submitted to the EPA as a SIP revision.

Scope of the rulemaking:

A.) Summary of what the rulemaking will do:

The proposed rulemaking would revise Chapter 117 to implement RACT requirements for all major sources of NO_x in the DFW area. For owners or operators of boilers and process heaters used on a temporary basis, the proposed rulemaking would provide compliance flexibility to affected units in all areas covered by Chapter 117.

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

FCAA, §172(c)(1) and §182(f) requires the state to submit a SIP revision implementing RACT for all major sources of NO_x in the DFW area. The proposed rulemaking would implement only those RACT requirements that staff determines to be technologically and economically feasible. The proposed rulemaking would also establish emission limits and control requirements; implement work practice standards or operating requirements; require or update associated monitoring, recordkeeping, and reporting; establish exemptions; and add other requirements necessary to implement RACT. The rulemaking would add compliance dates for the new or revised RACT rules and add compliance dates for sources that become subject to these rules after the initial compliance date. The rulemaking would also update existing compliance schedules and definitions to reflect the change in attainment status of Wise County.

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

While not specifically required to satisfy FCAA RACT requirements, the proposed rulemaking would revoke an exemption for utility turbines and auxiliary steam boilers installed after November 15, 1992 in the DFW area. The post-1992 exemption relies on permitting to satisfy RACT requirements. While this exemption was previously approved by the EPA, relying on the Chapter 117 rules to satisfy FCAA RACT requirements rather than on permitting provides a clearer RACT demonstration and is consistent with the other Chapter 117 rules in the DFW area. Affected facilities in the nine-county DFW 1997 eight-hour ozone nonattainment area currently exempted under this provision already meet the NO_x emission specifications and therefore, would not need to install additional controls. Affected facilities in Wise County also already meet the NO_x emission specifications and would not need to install additional controls. The proposed rulemaking would also provide compliance flexibility to owners or operators of a site that use temporary boilers or process heaters for less than 60 consecutive calendar days, by allowing the use of previous stack test results conducted on the unit that would be newly installed or relocated at the account or a manufacturer's guarantee of performance. The proposed changes would be applicable to affected units in all areas covered by Chapter 117. Previous testing must conform to

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existing Chapter 117 stack testing requirements, and the owner or operator of the site must maintain at the site a record of the previous test report.

While also not required to satisfy RACT requirements, the proposed rulemaking would revise the definition of electric power generating system to clarify the applicability of independent power producers in the ozone nonattainment areas. The revisions make clear that independent power producers located in the Houston-Galveston-Brazoria ozone nonattainment area would be subject to the provisions in Subchapter B, Division 3, whereas such owners or operators located in either the Beaumont-Port Arthur ozone nonattainment area or the DFW area would be subject to the provisions in Subchapter C, Division 3. The changes are not intended to expand the definition.

The proposed rulemaking would repeal Subchapter B, Division 2 and Subchapter C, Division 2, which have been made obsolete by the passing of compliance dates because sources previously subject to these divisions are now required to comply with more stringent rules in Subchapter B, Division 4 and Subchapter C, Division 4, respectively.

In addition, the rulemaking would include other non-substantive revisions to Chapter 117 to remove obsolete language, use consistent terminology, and update the rule language to current *Texas Register* and TCEQ style and format requirements.

Statutory authority:

The following provisions authorize the commission to adopt rules necessary to carry out its powers and duties: Texas Water Code (TWC), §5.102, General Powers, §5.103, Rules, and §5.105, General Policy (these provisions authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC); Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA), §382.017, Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA; THSC, §382.002, Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, General Powers and Duties, which authorizes the commission to control the quality of the state's air; and THSC, §382.012, State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air.

Also, THSC, §382.016, Monitoring Requirements; Examination of Records, authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; §382.021, Sampling Methods and Procedures, authorizes the commission to prescribe the sampling methods and procedures; and §382.051 Permitting Authority of Commission; Rules, authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under Chapter 382. The rule amendment would also be proposed under 42 United States Code, §§7401, *et seq.*, which requires states to submit SIP

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revisions that specify the manner in which the NAAQS will be achieved and maintained within each air quality control region of the state.

Effect on the:

A.) Regulated community:

The proposed rules would be applicable to owners or operators of major stationary sources of NO_x located in the DFW area. Because Wise County was previously classified as attainment for the 1997 eight-hour ozone standard, and this proposed rulemaking would extend implementation of RACT to all major sources of NO_x located in Wise County, owners or operators of any gas-fired engine, gas-fired turbine, or gas-fired process heater located in Wise County would be required to comply with the proposed rules. Most major sources of NO_x in the other nine counties of the DFW 2008 eight-hour ozone nonattainment area are already subject to Chapter 117 rule requirements that meet or exceed RACT. Owners or operators of any wood-fired boilers located in the DFW area would be required to comply with the proposed rules; this is to incorporate any new major sources of NO_x in the other nine counties that were not addressed in previous RACT rulemakings. Only one wood-fired boiler, in Kaufman County, has been identified as being affected by the proposed rule, and the boiler already has the controls installed and meets the proposed emission specification for wood-fired boilers. Owners or operators of any auxiliary steam boiler or gas-fired turbine placed into service after November 15, 1992 would be required to comply with the proposed rules due to the proposed removal of an existing exemption for these electric utility generating sources in the DFW area. However, these facilities already comply with the applicable NO_x emission specification, and additional controls would not be necessary. If adopted, the proposed rulemaking would require owners or operators of affected sources to comply with the emission standards, conduct initial emissions testing or continuous emissions monitoring to demonstrate compliance, install and operate a totalizing fuel flow meter, perform quarterly and periodic annual emissions compliance testing on engines, submit compliance reports to the TCEQ, and maintain the appropriate records demonstrating compliance with the proposed rules, including but not limited to fuel usage, produced emissions, emissions-related control system maintenance, and emissions performance testing.

The first five years the rules are in effect are used in the fiscal analysis associated with this proposed rulemaking. For the first year, an estimated fiscal amount of \$1,456,725 covers the capital costs associated with equipment purchase and labor and installation and annual costs associated with emissions compliance testing and monitoring and equipment maintenance. The fiscal amount of \$1,254,750 for years two, three, four, and five covers the costs of emissions compliance testing and monitoring and equipment maintenance. Combined total capital and total annual costs for all affected units to comply with the proposed requirements of this rulemaking are estimated at \$2,711,475, with total capital outlay estimated to be \$881,350 and total annual outlay estimated to be \$1,830,125. The cost-effectiveness for the proposed emission reductions from all affected units is estimated at \$1,563 per ton of NO_x reduced. Large businesses would be affected by the proposed

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rulemaking. No small businesses or individuals were identified as potentially affected, and the proposed rulemaking is not expected to have any effect on a local economy.

B.) Public:

The public benefit anticipated from the changes seen in the proposed rules would be continued protection of the environment and public health and safety combined with efficient and fair administration of NO_x emission standards for the DFW area. It is estimated that the proposed rules would reduce the amount of NO_x in the DFW area by 1.17 tons per day.

C.) Agency programs:

The rulemaking may increase the workload for Office of Compliance and Enforcement staff when inspecting affected facilities to verify compliance with any new or revised Chapter 117 requirements.

Stakeholder meetings:

An Ozone Planning Public Information Meeting was held at the North Central Texas Council of Governments in Arlington, Texas on September 5, 2013.

Potential controversial concerns and legislative interest:

The EPA's proposed implementation rule for the 2008 eight-hour ozone standard (78 FR 34178, June 6, 2013) included two alternative deadlines for submitting the various SIP elements: (1) submit the emissions inventory and RACT SIP revisions by July 20, 2014 and the other major SIP elements by July 20, 2015; or (2) submit all required SIP elements together by January 20, 2015. The current timeline is to submit all elements together by July 20, 2015. This is consistent with the approach taken in 2007 during the transition to the 1997 eight-hour NAAQS in both the DFW and Houston-Galveston-Brazoria areas. Because this proposed RACT SIP revision will not be submitted by the deadline specified in the implementation rule or the FCAA, the EPA could issue a finding of failure to submit. Such a finding could result in the imposition of sanctions on the state and promulgation of a federal implementation plan (FIP) under FCAA, §179, unless a plan is submitted to the EPA within 18 months after the EPA makes such a finding (not earlier than January 20, 2016). The current schedule would have the SIP submitted to the EPA by July 2015. Sanctions could include transportation funding restrictions, grant withholding, and increased emissions offsets requirements for new construction and major modification of stationary sources in the DFW ozone nonattainment area. The EPA would be required to impose such sanctions and implement a FIP until a SIP revision is approved for the area.

Owners and operators of units that may be subject to new RACT requirements in the DFW area from this rulemaking may oppose more stringent NO_x control requirements. Additionally, in the proposed implementation rule for the 2008 eight-hour ozone NAAQS, the EPA requires that RACT be implemented by January 1, 2017. Under the current proposed schedule, this rulemaking would be adopted in June 2015. Therefore, affected

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entities would only have from June 2015 through December 2016 to implement RACT control strategies and may object to the short time frame for compliance.

Will this rulemaking affect any current policies or require development of new policies?

No.

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

FCAA, §172(c)(1) and §182(f), requires the state to submit a SIP revision implementing RACT for all major sources of NO_x in the DFW area. Failure to submit a SIP revision could result in sanctions or promulgation of a FIP. One alternative would be to address the DFW area only and not clarify or clean up language that impacts other parts of Texas.

Key points in the proposal rulemaking schedule:

Anticipated proposal date: December 10, 2014

Anticipated *Texas Register* publication date: December 26, 2014

Anticipated public hearing dates: January 15, 2015 and January 22, 2015

Anticipated public comment period: December 26, 2014 through January 30, 2015

Anticipated adoption date: June 3, 2015

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