

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendments to §§117.10, 117.400, 117.423, 117.425, 117.430, 117.435, 117.440, 117.445, 117.450, 117.454, 117.456, 117.1303, 117.1310, 117.1325, 117.1335, 117.1340, 117.1345, 117.1350, 117.1354, 117.8000, 117.9800, and 117.9810; the repeal of §§117.200, 117.203, 117.205, 117.210, 117.215, 117.223, 117.225, 117.230, 117.235, 117.240, 117.245, 117.252, 117.254, 117.256, 117.1100, 117.1103, 117.1105, 117.1110, 117.1115, 117.1120, 117.1125, 117.1135, 117.1140, 117.1145, 117.1152, 117.1154, 117.1156, 117.9010, and 117.9110; and new §117.452 *without changes* to the proposed text as published in the December 26, 2014, issue of the *Texas Register* (39 TexReg 10337) and, therefore, will not be republished. The commission adopts amendments to §§117.403, 117.410, 117.9030, and 117.9130; and new §117.405 *with changes* to the proposed text.

The adopted new, amended, and repealed sections of Chapter 117 will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP), except for: §§117.210(c), 117.225, 117.405(d), 117.410(d), 117.425, 117.1110(b), 117.1125, 117.1310(b), and 117.1325. Sections 117.210(c), 117.225, 117.410(d), 117.425, 117.1110(b), 117.1125, 117.1310(b), and 117.1325 correspond to portions of the existing rule previously excluded from the EPA-approved Texas SIP and will not be submitted with this revision. Similarly, adopted new §117.405(d) will not be submitted to the EPA as a SIP revision.

## **Background and Summary of the Factual Basis for the Adopted Rules**

### *General Background*

The 1990 Federal Clean Air Act (FCAA) Amendments (42 United States Code (USC), §§7401 *et seq.*) require the EPA to establish primary National Ambient Air Quality Standards (NAAQS) that protect public health and to designate areas as either in attainment or nonattainment with the NAAQS or as unclassifiable. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once established by the EPA. Each state is required to submit a SIP to the EPA that provides for attainment and maintenance of the NAAQS.

On March 27, 2008, the EPA revised both the primary and secondary ozone standard (the eight-hour ozone NAAQS) to a level of 0.075 parts per million (ppm) with an effective date of May 27, 2008 (73 FR 16436). On May 21, 2012, the EPA established initial air quality designations for the 2008 eight-hour ozone NAAQS. Effective July 20, 2012, 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, was classified as a moderate nonattainment area with an attainment deadline of December 31, 2018 (77 FR 30088, May 21, 2012).

On December 23, 2014 the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) ruled on a lawsuit filed by the Natural Resources Defense Council, which resulted in vacatur of the EPA's December 31 attainment date for the 2008

Ozone NAAQS. As part of the EPA's Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements; Final Rule, published in the *Federal Register* on March 6, 2015 (80 FR 12264), the EPA modified 40 Code of Federal Regulations (CFR) §51.1103 consistent with the D.C. Circuit Court decision to establish attainment dates that run from the effective date of designation, i.e., July 20, 2012, rather than the end of the 2012 calendar year. As a result, the attainment date for the DFW moderate nonattainment area has changed from December 31, 2018, to July 20, 2018. In addition, because the attainment year ozone season is the ozone season immediately preceding a nonattainment area's attainment date, the attainment year for the DFW moderate nonattainment area has changed from 2018 to 2017. The change in attainment date will not impact this rulemaking because the compliance date for implementing reasonably available control technology (RACT) remains January 1, 2017, as required by the EPA's implementation rule for the 2008 eight-hour ozone NAAQS (80 FR 12264, March 6, 2015).

Nonattainment areas classified as moderate and above are required to meet the mandates of the FCAA under FCAA, §172(c)(1) and §182(f). FCAA, §172(c)(1) requires that the SIP incorporate all reasonably available control measures, including 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<sub>x</sub>).

The 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 adopted rulemaking will revise Chapter 117 to implement RACT for all major sources of NO<sub>x</sub> in the DFW area as required by FCAA, §172(c)(1) and §182(f). The state previously adopted Chapter 117 RACT rules for sources in the DFW area as part of the SIP submitted by the state on May 30, 2007, for the 1997 eight-hour ozone standard, and the EPA approved these rules on December 8, 2008 (73 FR 73562). However, Wise County was classified as attainment under the 1997 eight-hour ozone standard, so the Chapter 117 RACT rules do not currently apply in Wise County. The adopted rulemaking will extend implementation of RACT to major sources of NO<sub>x</sub> located in Wise County. These adopted rules will be submitted to the EPA as a SIP revision.

Under the 1997 eight-hour ozone NAAQS, the DFW eight-hour ozone nonattainment area consisted of nine counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant) and was classified as a serious nonattainment area. The EPA's implementation rule for the 2008 eight-hour ozone NAAQS requires retaining the most stringent major source emission threshold level for sources in an area to prevent backsliding (80 FR 12264, March 6, 2015). For this reason, the major source threshold for the nine counties remains the serious classification potential to emit (PTE) of 50 tons per year (tpy) of NO<sub>x</sub>. For Wise County, the major source threshold is the moderate

classification PTE of 100 tpy of NO<sub>x</sub>.

The emission reduction requirements from this adopted rulemaking will result in reductions in ozone precursors in Wise County. The adopted compliance date for implementing control requirements and emission reductions for the DFW area is January 1, 2017, as required by the EPA's implementation rule for the 2008 eight-hour ozone NAAQS (80 FR 12264, March 6, 2015).

Adopted subchapters, divisions, and key sections with new requirements or modifications associated with the DFW 2008 eight-hour ozone RACT rulemaking include: Subchapter A, Definitions, §117.10; Subchapter B, Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas, Division 4, Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources, §§117.400, 117.403, 117.405, 117.410, 117.423, 117.425, 117.430, 117.435, 117.440, 117.445, 117.450, 117.452, 117.454, and 117.456; Subchapter C, Combustion Control at Major Utility Electric Generation Sources in Ozone Nonattainment Areas, Division 4, Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources, §§117.1303, 117.1310, 117.1325, 117.1335, 117.1340, 117.1345, 117.1350, and 117.1354; Subchapter G, General Monitoring and Testing Requirements, Division 1, Compliance Stack Testing and Report Requirements, §117.8000; and Subchapter H, Administrative Provisions, Division 1, Compliance Schedules, §117.9030 and §117.9130, and Division 2, Compliance Flexibility, §117.9800 and §117.9810.

Subchapters, divisions, and key sections adopted for repeal by the commission associated with this rulemaking include all of Subchapter B, Division 2, Dallas-Fort Worth Ozone Nonattainment Area Major Sources and Subchapter C, Division 2, Dallas-Fort Worth Ozone Nonattainment Area Utility Electric Generation Sources.

The commission also adopts clarifications and minor revisions that will affect some sources in other areas covered by Chapter 117, such as changes to definitions and testing provisions for compliance flexibility. These changes and other changes are adopted to ensure the appropriate monitoring, testing, recordkeeping, and reporting requirements for demonstrating compliance are in the rule provisions in addition to providing clarity and compliance flexibility to owners or operators of affected units. These adopted changes are discussed in detail in the Section by Section Discussion section of this preamble.

*SUBCHAPTER B: COMBUSTION CONTROL AT MAJOR INDUSTRIAL, COMMERCIAL,  
AND INSTITUTIONAL SOURCES IN OZONE NONATTAINMENT AREAS*

*DIVISION 2: DALLAS-FORT WORTH OZONE NONATTAINMENT AREA MAJOR  
SOURCES*

The commission adopts the repeal of existing Subchapter B, Division 2 because compliance dates for sources of NO<sub>x</sub> subject to this division have passed and are now considered obsolete. Furthermore, sources previously subject to this division are now required to comply with more stringent rules in existing Subchapter B, Division 4.

*DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE NONATTAINMENT AREA*

*MAJOR SOURCES*

The commission adopts revisions to Subchapter B, Division 4 to add emission control requirements for major industrial, commercial, or institutional (ICI) sources of NO<sub>x</sub> in Wise County and for major ICI sources of NO<sub>x</sub> in the other nine counties that were not addressed in previous RACT rulemakings. For the other nine counties, one new major ICI source of NO<sub>x</sub> was identified in Kaufman County. Adopted revisions to this division will require some owners or operators of major ICI sources in Wise or Kaufman Counties to reduce NO<sub>x</sub> emissions from certain stationary sources and source categories to satisfy RACT requirements. For Wise County, a major source of NO<sub>x</sub> is any stationary source or group of sources located within a contiguous area and under common control that emits or has the PTE equal to or greater than 100 tpy of NO<sub>x</sub>. For the remaining nine counties, a major source of NO<sub>x</sub> is any stationary source or group of sources located within a contiguous area and under common control that emits or has the PTE equal to or greater than 50 tpy of NO<sub>x</sub>. In the adopted rulemaking, the stationary source type categories with controls in Wise County are process heaters, stationary internal combustion gas-fired engines, and stationary gas turbines. In Kaufman County, the stationary source type category with controls is wood-fired boilers. Adopted revisions to Subchapter B, Division 4 will also extend applicability of existing monitoring, testing, recordkeeping, and reporting requirements to the affected sources located in Wise and Kaufman Counties. These requirements will be necessary to ensure compliance with the adopted emission

specifications and to ensure that the NO<sub>x</sub> emission reductions are achieved. Specific discussion associated with the adopted emission specifications and other requirements in adopted revised Subchapter B, Division 4 is provided in the Section by Section Discussion section of this preamble.

The commission estimates that this adopted rule will result in a reduction of 1.17 tons per day of NO<sub>x</sub> from major ICI sources in the DFW area. Although the commission estimated this reduction amount from the affected sources, the emissions reductions from the control strategies adopted during this rulemaking were not included in the attainment demonstration photochemical modeling associated with the 2015 DFW Attainment Demonstration SIP revision (Non-Rule Project No. 2013-015-SIP-NR) being adopted concurrent with this rulemaking. In the RACT rules adopted for the May 30, 2007 DFW SIP revision (Non-Rule Project No. 2006-013-SIP-NR), the state fulfilled NO<sub>x</sub> RACT requirements through adoption of emissions specifications in §117.410 to demonstrate attainment for the nine counties of the DFW 1997 eight-hour ozone nonattainment area. With this adopted rulemaking, the commission fulfills NO<sub>x</sub> RACT requirements for the DFW 2008 eight-hour ozone nonattainment area by implementing the adopted requirements for major sources in Wise County and Kaufman County.

*SUBCHAPTER C: COMBUSTION CONTROL AT MAJOR UTILITY ELECTRIC  
GENERATION SOURCES IN OZONE NONATTAINMENT AREAS*

*DIVISION 2: DALLAS-FORT WORTH OZONE NONATTAINMENT AREA UTILITY*

*ELECTRIC GENERATION SOURCES*

The commission adopts the repeal of existing Subchapter C, Division 2 because compliance dates for sources of NO<sub>x</sub> subject to this division have passed and are now considered obsolete. Furthermore, sources previously subject to this division are now required to comply with more stringent rules in existing Subchapter C, Division 4.

*DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE NONATTAINMENT AREA  
UTILITY ELECTRIC GENERATION SOURCES*

The commission adopts revisions to Subchapter C, Division 4 requirements for utility electric generation sources in the DFW area. The commission is not adopting changes to the existing RACT emission specifications that were adopted as emissions specifications for attainment demonstration in the previous RACT rulemaking, as adopted in the May 30, 2007, DFW SIP revision. The commission adopts the repeal of an existing exemption for auxiliary steam boilers and stationary gas turbines that were placed into service after November 15, 1992. This adopted revision makes the utility rules that apply to gas turbines in the DFW area consistent with the major source industrial rules in the DFW area and provides a more efficient RACT demonstration for the affected utility sources. Specific discussion associated with the adopted emission specifications and other requirements in adopted revised Subchapter C, Division 4 is provided in the Section by Section Discussion section of this preamble. With this adopted rulemaking, the commission implements and fulfills NO<sub>x</sub> RACT requirements for major sources in Wise County.

This adopted rulemaking will include Wise County as part of the DFW 2008 eight-hour ozone nonattainment area since it was designated as nonattainment by the EPA in the final designations rule published in the *Federal Register* on May 21, 2012 (77 FR 30088).

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 D.C. Circuit Court. Because the TCEQ cannot predict the outcome of this litigation at this time, the commission adopts rules that will ensure that sources within Wise County will be properly accounted for in the DFW 2008 attainment demonstration SIP. Should Wise County be removed from the DFW 2008 eight-hour ozone nonattainment area after the adoption of these rules, the adopted rules will allow the commission to exempt sources in Wise County from major source RACT requirements upon notice by the TCEQ via publication in the *Texas Register* that Wise County is no longer a part of the DFW 2008 eight-hour ozone nonattainment area.

### **Section by Section Discussion**

In addition to the adopted amendments associated with implementing RACT for the DFW area and specific minor clarifications and corrections discussed in greater detail in this Section by Section Discussion, the adopted rulemaking also includes various stylistic, non-substantive changes to update rule language to current *Texas Register* style and format requirements. Such changes included appropriate and consistent use of acronyms, section references, rule structure, and certain terminology. These changes are non-substantive and generally not specifically discussed in this preamble. Comments

received regarding sections and rule language associated only with reformatting and minor stylistic changes were not considered, and no changes were made based on such comments.

#### *SUBCHAPTER A: DEFINITIONS*

##### *Section 117.10, Definitions*

The commission revises the definitions of applicable ozone nonattainment areas in §117.10(2). The commission adopts the removal of existing §117.10(2)(B), DFW ozone nonattainment area. The existing definition of "Dallas-Fort Worth ozone nonattainment area" includes Collin, Dallas, Denton, and Tarrant Counties. Divisions relating to this four-county DFW area have been made obsolete by the passing of compliance dates, and sources of NO<sub>x</sub> previously subject to these divisions are now required to comply with more stringent rules in existing divisions relating to the expanded nine-county DFW area. The commission re-letters existing §117.10(2)(C), "Dallas-Fort Worth eight-hour ozone nonattainment area," to §117.10(2)(B), and existing §117.10(2)(D), "Houston-Galveston-Brazoria ozone nonattainment area," to §117.10(2)(C). The commission also revises the definition of "Dallas-Fort Worth eight-hour ozone nonattainment area." The existing definition of "Dallas-Fort Worth eight-hour ozone nonattainment area" includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties. For the purposes of Chapter 117, Subchapter D, Combustion Control at Minor Sources in Ozone Nonattainment Areas, the revised definition of the DFW area includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties; and for all other divisions of Chapter 117, the

revised definition of the DFW area includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties. This adopted change to the definition of "Dallas-Fort Worth eight-hour ozone nonattainment area" is necessary because the commission did not apply the existing minor source rules to sources located in Wise County.

The commission revises the definition of "electric power generating system" in §117.10(14) to clarify the applicability of independent power producers in the ozone nonattainment areas. Systems that are owned or operated by independent power producers and are located in the Beaumont-Port Arthur (BPA) ozone nonattainment area or the 10-county DFW 2008 eight-hour ozone nonattainment area are subject to Chapter 117, Subchapter C. However, as the current definition in existing §117.10(14)(C) states, cogeneration units and independent power producers in the Houston-Galveston-Brazoria (HGB) ozone nonattainment area are subject to the industrial, commercial, and institutional rules in Subchapter B.

The commission therefore revises §117.10(14) to clarify this difference in applicability between the different ozone nonattainment areas for independent power producers. The adopted revisions to subparagraph (A) add independent power producers but limit the applicability of the definition to only the BPA and DFW areas. Adopted changes to §117.10(14)(A) include removal of existing §117.10(14)(A)(ii), "Dallas-Fort Worth," consistent with the removal of §117.10(2)(B). The commission moves existing §117.10(14)(A)(iii), "Dallas-Fort Worth eight-hour," to §117.10(14)(A)(ii). Existing

§117.10(14)(A)(iv), "Houston-Galveston-Brazoria," is removed to coincide with changes adopted in §117.10(14)(B) and in revised §117.10(14)(C). The commission therefore also moves existing §117.10(14)(B) to amended §117.10(14)(D). To address electric power generating systems located in the HGB area subject to Chapter 117, Subchapter C, the commission modifies subparagraph (B) in §117.10(14). Adopted §117.10(14)(B) is necessary to address specific combustion unit types that are part of electric power generating systems located in the HGB ozone nonattainment area that are subject to Subchapter C, Division 3 while maintaining the distinction established under §117.10(14)(C) for independent power producers. The commission therefore also revises §117.10(14)(C) to clarify that the provision only applies to Subchapter B, Division 3 and to update the reference from revised §117.10(14)(A) to concurrent adopted §117.10(14)(B). These changes to §117.10(14) are adopted to clarify the existing definition of an "electric power generating system" and are not intended to expand the definition.

The commission revises the definition of "emergency situation" in §117.10(15)(A)(ii) and (vii) to update the references to the Electric Reliability Council of Texas (ERCOT) Protocols to the most recent published version of the ERCOT Protocols, August 13, 2014.

The commission revises the definition of "large utility system" in §117.10(24) to remove the reference to "Dallas-Fort Worth" as an applicable ozone nonattainment area to be consistent with the removal of existing §117.10(2)(B).

The commission revises the definition of "major source" in §117.10(29). Adopted changes to §117.10(29)(B) include the removal of reference to "Dallas-Fort Worth" or "Dallas-Fort Worth eight-hour ozone nonattainment area" and adding Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties as applicable counties. Adopted §117.10(29)(C) includes a new major source applicability threshold of at least 100 tpy of NO<sub>x</sub> for sources located in Wise County. These changes are necessary to be consistent with adopted §117.10(2)(B), concerning the revised definition of "Dallas-Fort Worth eight-hour ozone nonattainment area," and to reflect the difference in the applicability threshold because of the different classifications between Wise County and the other nine counties included in the DFW ozone nonattainment area. The commission also moves existing §117.10(29)(C) to §117.10(29)(D) and re-letters existing §117.10(29)(D) to §117.10(29)(E).

Adopted revisions to the definition of "small utility system" in §117.10(44) include the removal of the reference to "Dallas-Fort Worth" as an applicable ozone nonattainment area to be consistent with the removal of existing §117.10(2)(B).

The commission revises the definition of "unit" in §117.10(51). Adopted changes to §117.10(51)(A) include a reference to new §117.405, Emission Specifications for Reasonably Available Control Technology (RACT), to define unit as any boiler, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in §117.10. In addition, revised §117.10(51)(A) includes removing references to repealed sections.

Finally, adopted changes to §117.10(51)(B) include deleting references to §117.210 and §117.1110 because these sections are repealed.

*SUBCHAPTER B: COMBUSTION CONTROL AT MAJOR INDUSTRIAL, COMMERCIAL,  
AND INSTITUTIONAL SOURCES IN OZONE NONATTAINMENT AREAS*

*DIVISION 2: DALLAS-FORT WORTH OZONE NONATTAINMENT AREA MAJOR  
SOURCES*

The commission adopts the repeal of existing Subchapter B, Division 2, which has been made obsolete by the passing of compliance dates because sources of NO<sub>x</sub> previously subject to this division are now required to comply with more stringent rules in existing Subchapter B, Division 4.

*DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE NONATTAINMENT AREA  
MAJOR SOURCES*

To address new RACT requirements for sources of NO<sub>x</sub> located in Wise County, the commission adopts a new section, §117.405, in revised Subchapter B, Division 4 that will include new rules applicable to any major stationary source of NO<sub>x</sub> in Wise County. New NO<sub>x</sub> RACT requirements necessary for major stationary sources of NO<sub>x</sub> in the other nine counties not already addressed under the current rules are included as adopted revisions to the existing §117.410. The commission did not expand the list of applicable unit types at major ICI stationary sources of NO<sub>x</sub> as it currently exists in §117.400 in revised Subchapter

B, Division 4.

*Section 117.400, Applicability*

Adopted revisions to §117.400 clarify which unit types located in specific counties in the revised DFW eight-hour ozone nonattainment area will be subject to the adopted revisions of Subchapter B, Division 4. Adopted §117.400(a) retains the list of applicable units located at major sources of NO<sub>x</sub> in existing §117.400 and specifies that these units must be located at major sources of NO<sub>x</sub> located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County. This change is necessary to clarify that specific units located in the existing nine-county DFW eight-hour ozone nonattainment area will be subject to revised §117.410(a), with the exception of the one wood-fired boiler located in Kaufman County. The wood-fired boiler identified in Kaufman County in the calendar year 2012 TCEQ Point Source Emissions Inventory (2012 EI) will be an applicable unit under revised §117.400(a) subject to the NO<sub>x</sub> emission specification of adopted new §117.405(a) as an ICI boiler.

The commission adopts §117.400(b) to specify the units located at major sources of NO<sub>x</sub> located in Wise County that will be subject to new §117.405(b). The adopted stationary source type categories are ICI process heaters, stationary gas turbines, and stationary internal combustion engines.

*Section 117.403, Exemptions*

Adopted revisions to §117.403 clarify exemption criteria of units that will be exempt from specified requirements of revised Subchapter B, Division 4. To be consistent with the adopted revisions in §117.400, the commission revises §117.403(a), which retains the list of applicable unit types, sizes, and uses in existing §117.403(a). The commission specifically lists Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County in subsection (a) to make clear that the list of exemptions provided in the subsection is only applicable in those counties and because exemptions applicable in Wise County are adopted to be listed separately. Changes to existing §117.403(a)(4) are adopted to facilitate consistency between the unit size exemption threshold in §117.403(a)(4) and the existing definition of maximum rated capacity, as defined in §117.10. Adopted revisions to §117.403(a)(7)(A) and (B) are necessary to clarify that the exemption criteria for research and testing and performance verification and testing refer to research, testing, and performance verification of the stationary gas turbine or stationary internal combustion engine itself.

Revisions to §117.403(a)(7)(D) are adopted in order to clarify that unit operation for testing or maintenance purposes up to 100 hours per year refers to testing and maintenance of the stationary gas turbine or stationary internal combustion engine itself. In addition, the commission revises the operating hours limit for exemption criteria for stationary gas turbines and stationary internal combustion engines from a rolling 12-month average to a rolling 12-month basis. The owner or operator of an affected unit will sum all operating hours for a consecutive 12-month period, and continue doing so on a rolling 12-month

basis, as opposed to calculating the average of all operating hours during a consecutive 12-month period. A 12-month rolling average would only apply to an hours per month limit, thus conflict with an hour per year limit while a 12-month rolling basis is the preceding 12-month total, which matches the 100 hours per year limit. This will more accurately reflect the intent of the rule and how an affected unit will demonstrate compliance with the operating restriction of a total of 100 hours per year. Similarly to more accurately reflect the intent of the rule, revisions to existing §117.403(a)(8)(A) and (9)(A) are adopted by the commission to specify that the operating hours limit for exemption criteria for stationary diesel engines will be on a rolling 12-month basis and not on a rolling 12-month average and demonstrate how an affected unit will demonstrate compliance with the operating restriction of a total of 100 hours per year. The owner or operator of an affected unit will sum all operating hours for a consecutive 12-month period, and continue doing so on a rolling 12-month basis, as opposed to calculating the average of all operating hours during a consecutive 12-month period.

The commission deletes existing §117.403(b), concerning increment of progress (IOP) exemptions, because the provisions reference existing §117.410(a), which is concurrently adopted for deletion by the commission. The provisions of deleted §117.403(b) apply to gas-fired stationary, reciprocating internal combustion engines which, due to the passing of compliance dates, are now subject to more stringent rules in existing Subchapter B, Division 4.

Adopted §117.403(b) specifies the unit types, sizes, or uses for units located in Wise County that will be exempt from the requirements of this division. The unit type, maximum rated capacity, or specific use of a unit for which compliance with the adopted NO<sub>x</sub> emission specifications is technically or economically infeasible are exempted from the provisions of this division, except as specified in revised §§117.440(i), 117.445(f)(4), and 117.450 and in new §117.452. The exceptions to the adopted exemptions are related to monitoring, recordkeeping, and control plan requirements associated with exempted units. Amended §117.403(b)(1) specifies that ICI process heaters with a maximum rated capacity of less than 40 million British thermal units per hour (MMBtu/hr) will be exempted. This exemption level is adopted to be consistent with previous RACT exemption approaches for ICI process heaters located in the DFW area and the HGB area.

The following stationary gas turbines and stationary internal combustion engines will be exempt in adopted §117.403(b)(2)(A) - (E): gas turbines and engines used in research and testing of the unit, used for purposes of performance verification and testing of the unit, used solely to power other gas turbines or engines during startups; used exclusively in emergency situations (except that operation for testing or maintenance purposes of the gas turbine or engine itself is allowed up to 100 hours per year, based on a rolling 12-month basis); or used in response to and during the existence of any officially declared disaster or state of emergency. These exemptions are adopted due to the limited number, if any, of these unit types used in this dedicated service.

Adopted §117.403(b)(3) specifies an exemption for any stationary diesel engine, and adopted §117.403(b)(4) specifies an exemption for any stationary dual-fuel engine. Both stationary diesel and dual-fuel engines will meet the applicability criterion of stationary internal combustion engine in adopted §117.400(b); however, no units of these types were identified in the 2012 EI for Wise County; and the commission did not adopt emission specifications for these unit types.

Adopted §117.403(b)(5) specifies an exemption for stationary gas-fired engines with a horsepower (hp) rating of less than 50 hp. This is consistent with the size exemption threshold currently provided for stationary gas-fired engines in the other nine counties of the nonattainment area previously established as a reasonable threshold to exempt smaller engines from the NO<sub>x</sub> control requirements.

Finally, the commission adopts subsection (c) to contain new section cross-references to adopted §117.410(a)(1) and (c) and deletes the cross-references to existing §117.410(b)(1) and (d).

*Section 117.405, Emission Specifications for Reasonably Available Control Technology (RACT)*

The commission adopts new §117.405, which establishes adopted NO<sub>x</sub> emission specifications to satisfy RACT requirements for units in the 10-county DFW 2008 eight-hour ozone nonattainment area that will be subject to this rulemaking.

Adopted new §117.405(a) includes the new emission specification for wood-fired boilers located in the revised DFW eight-hour ozone nonattainment area. The adopted 0.12 pounds per million British thermal units (lb/MMBtu) emission specification for wood fuel-fired boilers is based on the permitted Best Available Control Technology limit for the unit identified in the 2012 EI, and it is anticipated to require owners or operators of affected units to possibly install and operate selective catalytic reduction (SCR). The unit identified in Kaufman County in the 2012 EI currently operates with SCR for NO<sub>x</sub> control and uses a continuous emissions monitoring system (CEMS) for monitoring NO<sub>x</sub> emissions. While the commission contends this emission standard satisfies RACT for this particular wood fuel-fired boiler because the facility has already installed the controls necessary to meet the requirement, the commission does not contend that SCR represents RACT on wood fuel-fired boilers in general.

Adopted new §117.405(b) includes the new emission specifications that will apply to the following unit types at major ICI stationary sources of NO<sub>x</sub> located in Wise County: process heaters; stationary, reciprocating internal combustion engines; and stationary gas turbines.

Adopted new §117.405(b)(1) will establish the NO<sub>x</sub> emission specifications of 0.10 lb/MMBtu (or alternatively, 82 parts per million by volume (ppmv), at 3.0% oxygen (O<sub>2</sub>), dry basis) for process heaters with a maximum rated capacity equal to or greater than 40 MMBtu/hr. Combustion modifications, such as dry low-NO<sub>x</sub> combustors, may be necessary for process heaters with a maximum rated capacity equal to or greater than 40

MMBtu/hr to comply with the adopted 0.10 lb/MMBtu emission specification. No liquid-fired process heaters were identified in the 2012 EI in Wise County; however, combustion modifications may be necessary for a liquid-fired process heater to comply with the adopted NO<sub>x</sub> emission specifications in new §117.405(b)(1).

Adopted new §117.405(b)(2) provides NO<sub>x</sub> emission specifications for stationary, reciprocating internal combustion engines. The new language in §117.405(b)(2)(A) and (B) will establish NO<sub>x</sub> emission specifications for stationary, gas-fired rich-burn and lean-burn, reciprocating internal combustion engines. Gas-fired, rich-burn engines will be limited to 0.50 grams per horsepower-hour (g/hp-hr) in new §117.405(b)(2)(A). The adopted emission specifications for some gas-fired, lean-burn engines in §117.405(b)(2)(B) will be based on specific engine process parameters and the date the engine was placed into service, modified, reconstructed, or relocated. Any White Superior, model 8GTL825, gas-fired, lean-burn four-cycle engines placed into service, modified, reconstructed, or relocated before June 1, 2015, will be limited to 12.0 g/hp-hr, and on or after June 1, 2015, will be limited to 2.0 g/hp-hr. Any Clark, model HBAGT or HBA-6, gas-fired, lean-burn two-cycle engines placed into service, modified, reconstructed, or relocated before June 1, 2015, will be limited to 12.0 g/hp-hr, and on or after June 1, 2015, will be limited to 2.0 g/hp-hr. Finally, any Fairbanks Morse, model MEP-8T, gas-fired, lean-burn two-cycle engines placed into service, modified, reconstructed, or relocated before June 1, 2015, will be limited to 4.0 g/hp-hr, and on or after June 1, 2015, will be limited to 2.0 g/hp-hr. All other gas-fired, lean-burn engines will be limited to 2.0 g/hp-hr, regardless of the date

which the engine is placed into service modified, reconstructed, or relocated.

Nonselective catalytic reduction (NSCR), with an air-to-fuel ratio (AFR) controller, is expected to be the primary control technology for gas-fired, rich-burn engines. In some cases, the addition of a secondary catalyst module may be required to meet the adopted emission specification. The commission contends that the 0.50 g/hp-hr emission specification represents RACT for gas-fired, rich-burn engines based on the low cost and wide-spread demonstrated effectiveness of NSCR with meeting this control level.

The commission adopts specific NO<sub>x</sub> emission specifications based on engine make and model for the White Superior, Clark, and MEP units due to the following: engine manufacturers today produce few, if any, of these engine makes and models; retrofit options or kits to reduce NO<sub>x</sub> emissions may not exist for some of these particular makes and models; some units may have already undergone combustion modifications, such as low-emission combustion technology, to reduce emissions and thus may be unable to further reduce NO<sub>x</sub> emissions; and, in some cases, the cost to retrofit the unit may be more than the cost of a new unit. The commission therefore contends that these adopted emission levels for these specific units will satisfy RACT requirements considering technological and economic feasibility. For all other lean-burn engines, the commission anticipates that affected units will require combustion modifications to comply with the adopted 2.0 g/hp-hr emission specification, if necessary. Any new gas-fired, lean-burn engines installed in Wise County should be able to meet the adopted 2.0 g/hp-hr standard

without modification or installation of additional controls.

The commission acknowledges that the current emission specifications for stationary gas-fired, lean-burn engines in the other nine counties of the DFW eight-hour ozone nonattainment area are between 0.50 and 0.70 g/hp-hr and are more stringent than the emission specifications adopted for Wise County. However, the commission does not consider this control level to represent RACT for the gas-fired, lean-burn engines in Wise County. In proposing the emission specifications for gas-fired, lean-burn engines in the nine-county DFW 1997 eight-hour ozone nonattainment area in December 2006, the commission acknowledged that meeting this control level may necessitate the installation of SCR technology ((31 TexReg 10599) December 29, 2006, issue of the *Texas Register*). SCR would cost more than the technologies already evaluated for the particular stationary engines in Wise County and would likely result in the replacement of many of the gas-fired, lean-burn engines in Wise County. Such an outcome is contrary to the definition of RACT, i.e., 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. A control level cannot represent RACT for a "particular source" if it is more cost-effective to replace that source with an entirely new source in order to meet the emission limitation. The commission's adoption of the emission specifications for gas-fired, lean-burn engines in the nine-county DFW 1997 eight-hour ozone nonattainment area represented an appropriate control measure to help the area reach attainment with the 1997 eight-hour ozone NAAQS. However, control measures necessary to reach attainment

can, and may, go beyond RACT requirements. Some of the NO<sub>x</sub> control requirements adopted in 2007 for the DFW 1997 ozone NAAQS attainment demonstration were based only on RACT level of control and some, such as the emission specifications for gas-fired lean-burn engines, were beyond RACT. While the commission did not make this distinction in adopting the 2007 rulemaking and only indicated that the NO<sub>x</sub> emission specifications would fulfill RACT, the distinction is necessary to make clear the commission's intent for RACT in Wise County. Additionally, the commission is allowed to make source-specific RACT determinations, as the definition of RACT states. The commission contends that the NO<sub>x</sub> emission specifications in adopted §117.405(b)(2)(B) present RACT for the particular gas-fired lean-burn engines in Wise County.

The commission did not identify in Wise County any gas-fired engines fired on land-fill gas or any diesel fuel-fired or dual fuel-fired engines in the 2012 EI. Therefore, the commission did not adopt NO<sub>x</sub> RACT requirements for these categories of stationary engines.

The commission adopts new §117.405(b)(3) for NO<sub>x</sub> emission specifications for stationary gas turbines in Wise County. Stationary gas turbines with a hp rating of less than 10,000 hp will be limited to 0.55 lb/MMBtu, and stationary gas turbines with a hp rating of 10,000 hp or greater will be limited to 0.15 lb/MMBtu. These limits for industrial gas turbines are based on information identified in the 2012 EI similar to the approach used for gas-fired lean-burn engines, as well as on comments and supplemental information provided by affected source owners and operators: retrofit options or kits to reduce NO<sub>x</sub> emissions may

not exist for some of these particular makes and models; some units have already been retrofitted with dry low-NO<sub>x</sub> combustors to reduce emissions and thus may be unable to further reduce NO<sub>x</sub> emissions; and in some cases the cost to retrofit the unit may be more than the cost of a new unit. In response to comments, the commission is eliminating both the proposed unit size category of industrial gas-fired turbines with a rating of less than 4,500 hp in subsection (b)(3)(A) and the proposed unit size category for units with a rating of 4,500 hp or greater but less than 10,000 hp in subsection (b)(3)(B). The commission is replacing the unit size categories in proposed subsection (b)(3)(A) and (B) with a unit size category of less than 10,000 hp as adopted subsection (b)(3)(A). The corresponding NO<sub>x</sub> emission limit is 0.55 lb/MMBtu. The commission retains the unit size category for units with a rating of 10,000 hp or greater and the corresponding NO<sub>x</sub> emission limit of 0.15 lb/MMBtu, as proposed. To accommodate the changes in proposed subsection (b)(3)(A) and (B), the commission re-letters proposed subsection (b)(3)(C) as adopted subsection (b)(3)(B) with no substantive changes.

Based on supplemental data and information provided by affected source owners and operators of these units in Wise County, the commission determined that some affected units may not be able to meet the proposed NO<sub>x</sub> RACT emission standard of 0.20 lb/MMBtu without making significant modifications or retrofits at substantial costs. The commission determined at proposal that these costs did not represent RACT for industrial turbines in Wise County. The commission's assessment of ongoing emissions performance was based on existing emissions data in the 2012 EI, which the commission used to propose

the NO<sub>x</sub> RACT standards for industrial turbines in Wise County. This assessment may have been too conservative for the mid-size category of turbines rated 4,500 hp or greater but less than 10,000 hp. Additional information provided by commenters indicated unit performance variability among various turbine model ratings, and stack test data provided by an affected source owner or operator for specific units identified in Wise County, indicated greater unit-specific performance variability. The commission therefore determined that 0.55 lb/MMBtu for units rated less than 10,000 hp is an appropriate RACT control level considering current performance levels of existing units in Wise County and is consistent with the commission's determination of RACT at proposal. Based on the revised NO<sub>x</sub> emission specifications, the commission contends that the adopted emission levels for both unit size categories satisfy RACT requirements considering technological and economic feasibility.

Adopted new §117.405(c), concerning NO<sub>x</sub> averaging time, specifies the averaging times for compliance with the emission specifications of new §117.405(a) and (b). New §117.405(c)(1) specifies the averaging time for units equipped with CEMS or predictive emissions monitoring systems (PEMS) and provides three options under subparagraphs (A) - (C). Adopted subparagraph (A) specifies a rolling 30-day average, in units of the applicable emission standard. Adopted subparagraph (B) specifies a block one-hour average basis, in the units of the applicable emission standard. Adopted subparagraph (C) specifies a block one-hour average, in pounds per hour, for boilers and process heaters, calculated based on the maximum rated capacity and the applicable emission specification. For units not

equipped with CEMS or PEMS, adopted new §117.405(c)(2) requires the averaging time to be a block one-hour average in the units of the applicable emission standard but allows the emission specifications for boilers and process heaters to be applied in pounds per hour as specified in new §117.405(c)(1)(C).

The commission adopts new §117.405(d) that will establish emission specifications for related emissions from any unit subject to the emission specifications in new §117.405(a) or (b). This is necessary to ensure that the NO<sub>x</sub> reduction strategies of this adopted rulemaking do not result in a significant increase in emissions of other pollutants. Adopted new §117.405(d)(1) establishes a carbon monoxide (CO) emission specification of 400 ppmv at 3.0% O<sub>2</sub>, dry basis (or alternatively, 3.0 g/hp-hr for stationary internal combustion engines; or 775 ppmv at 7.0% O<sub>2</sub>, dry basis for wood fuel-fired boilers or process heaters) on a rolling 24-hour averaging period for units equipped with CEMS or PEMS for CO, and on a block one-hour averaging period for units not equipped with CEMS or PEMS for CO. Adopted new §117.405(d)(2) specifies that units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control must meet a 10 ppmv ammonia emission specification. The 10 ppmv ammonia emission specification is corrected to 3.0% O<sub>2</sub>, dry, for boilers and process heaters; 15% O<sub>2</sub>, dry, for stationary gas turbines and gas-fired lean-burn engines; and 3.0% O<sub>2</sub>, dry, for all other units. The specified averaging time for the ammonia emission specification is on a rolling 24-hour averaging period for units equipped with CEMS or PEMS for ammonia and on a block one-hour averaging period for units not equipped with CEMS or PEMS for ammonia. Adopted new subsection (d)(3) specifies that

the correction of CO emissions to 3.0% O<sub>2</sub>, dry basis, does not apply to boilers or process heaters operating at less than 10% of maximum load and with stack O<sub>2</sub> more than 15%.

Adopted new §117.405(e) specifies conditions for compliance flexibility with the NO<sub>x</sub> emission specifications of new §117.405. Adopted new §117.405(e)(1) specifies that owners or operators may use the source cap option under revised §117.423 or emission reduction credits as specified in revised §117.9800 to comply with the NO<sub>x</sub> emission specifications of new §117.405(a) or (b). Adopted new subsection (e)(2) prohibits using revised §117.425 as a method of compliance with the NO<sub>x</sub> emission specifications of adopted new §117.405(a) or (b). This prohibition is necessary to ensure that the NO<sub>x</sub> reductions anticipated from this adopted rulemaking will be realized. Adopted new subsection (e)(3) specifies that owners or operators may petition the executive director for an alternative to the CO and ammonia emission specifications of adopted new §117.405(d) according to revised §117.425.

The commission adopts new §117.405(f) to establish provisions for prohibition of circumvention to ensure that the anticipated NO<sub>x</sub> emission reductions associated with this adopted rulemaking will be realized. The adopted new subsection (f)(1) establishes that the maximum rated capacity used to determine the applicability of the emission specifications in new §117.405, the initial compliance demonstration in revised §117.435, the monitoring and testing requirements in revised §117.440, and the final control plan requirements in new §117.452, respectively, must be the greater of the maximum rated capacity as of December 31, 2012, the maximum rated capacity after December 31, 2012, or the maximum

rated capacity authorized by a permit issued under 30 TAC Chapter 116 after December 31, 2012. Adopted new §117.405(f)(2) specifies that a unit's classification for the purposes of revised new Subchapter B, Division 4, is determined by the most specific classification applicable to the unit as of December 31, 2012. Finally, new §117.405(f)(3) specifies that a source that met the definition of a major source as of December 31, 2012, is always classified as a major source for the purposes of revised Subchapter B, Division 4. A source that did not meet the definition of major source on December 31, 2012, but which at any time after December 31, 2012, becomes a major source, will from that time forward always be classified as a major source for purposes of revised Subchapter B, Division 4.

*Section 117.410, Emission Specifications for Eight-Hour Attainment Demonstration*

The commission removes existing §117.410(a) and moves existing §117.410(b), Emission specifications for eight-hour ozone attainment demonstration, to §117.410(a). The commission established the emission specifications under existing §117.410(a) for stationary, gas-fired rich-burn and lean-burn reciprocating internal combustion engines with a maximum rated capacity of 300 hp or greater under the 5% IOP plan for the nine counties in the existing DFW 1997 eight-hour ozone nonattainment area. With the passing of the compliance date for eight-hour ozone attainment demonstration emission specifications in existing §117.9030(b), these gas-fired engines are now subject to emission specifications for eight-hour ozone attainment demonstration in existing §117.410(b). In addition, the commission specifically lists Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County in revised subsection (a) to make clear that the

emission specifications provided in the subsection are only applicable in those counties and because emission specifications applicable in Wise County are listed separately.

Because of the removal of subsection (a), all other subsections are re-lettered accordingly. In addition, the commission inadvertently omitted Parker County from the list of counties in revised subsection (a) in the proposal publication of the rulemaking. The commission has included Parker County in the adoption of revised subsection (a).

Revisions to existing §117.410(b)(7)(A) include updating the reference in the figure to revised §117.410(a)(7)(A) to coincide with the adopted incorporation of existing §117.410(b) into revised §117.410(a).

Revised §117.410(c) establishes NO<sub>x</sub> emission specifications for related emissions from any unit subject to the emission specifications in revised §117.410(a). The commission deletes existing subsection (d)(4)(A) to be concurrent with the amendment of existing §117.410(a) and also because the IOP standards for the nine counties in the existing DFW area are being amended. In addition, the commission moves the provisions in existing subsection (d)(4)(B) to revised §117.410(c)(4)(A) - (C) because the restructuring of paragraph (4) is necessary to conform to *Texas Register* formatting requirements.

Adopted revisions to existing §117.410(f)(5) include updating the reference from existing §117.410(b)(14) to revised §117.410(a)(14) to coincide with the adopted incorporation of

existing §117.410(b) into revised §117.410(a). Lastly, the commission deletes existing §117.410(f)(6) since stationary gas-fired engines are no longer subject to existing §117.410(a). These gas-fired engines are now subject to provisions in existing §117.410(b), which is moved to revised §117.410(a).

In §117.410(f), the commission clarifies that testing or maintenance associated with the operating restriction of any stationary diesel or dual-fuel engine for testing or maintenance between the hours of 6:00 a.m. and noon refers to testing or maintenance of the engine itself.

*Section 117.423, Source Cap*

The commission revises §117.423(a) to incorporate references to new §117.405, Emission Specifications for RACT. The source cap approach is an option provided to owners or operators of affected units for demonstrating compliance with the NO<sub>x</sub> emission specifications of adopted new §117.405 in addition to those of revised §117.410.

Revised §117.423(b) specifies the equations and procedures for determining the source cap allowable NO<sub>x</sub> mass emission rate. The equation in revised §117.423(b)(1) specifies how to calculate the 30-day rolling average emission cap in pounds per day. Adopted revised §117.423(b)(1) contains new section cross-references to new §117.405. Revised subsection(b)(1) also defines the averaging period for determining the historical average daily heat input, variable  $H_i$ , as the 24 consecutive months between January 1, 2012, and

December 31, 2013, for units subject to new §117.405. In addition, the effective date for an applicable permit emission limit in Figure: 30 TAC §117.423(b)(1) for clause (ii) of variable  $R_i$  for units subject to new §117.405 is December 31, 2012. The commission adopts the new date and date range to make clear the dates that will apply to units subject to new §117.405 and the existing date and date range in existing subsection (b)(1) that apply to units subject to §117.410.

Revised Figure: 30 TAC §117.423(b)(4) contains an update to the equation for calculating the source cap allowable emission rate, in pounds per hour, for stationary internal combustion engines. The commission revises the exponential power in the equation from a positive to a negative number. This change will allow the units, Btu and MMBtu, of the equation to properly cancel. Without this change, the equation will calculate a value that will misrepresent the cap that is intended by the existing rule.

Revised §117.423(b)(5) specifies the equations for calculating the source cap allowable emission rate, in pounds per hour, for stationary gas turbines. The commission deletes the section cross-reference to existing §117.410(b) in the equation and adds new section cross-references to new §117.405 and revised §117.410 to reflect changes adopted in those sections.

Revised §117.423(g) includes section cross-references to new §117.405 for conditions for including a permanently retired, decommissioned, or rendered inoperable unit in the

source cap. Adopted revisions to subsection (g)(1) specify that the shutdown must have occurred after December 31, 2012, for units subject to new §117.405. In addition for units subject to new §117.405, if the unit was not in service 24 consecutive months between January 1, 2012, and December 31, 2013, adopted revised subsection (g)(3) specifies the actual heat input must be the average daily heat input for the continuous time period that the unit was in service, consistent with the heat input used to represent the unit's emissions in the 2012 modeling inventory. The commission adopts the new date and date range to make clear the dates that will apply to units subject to new §117.405 and the existing date and date range in existing subsection (g) that apply to units subject to §117.410. The years used for the rule represent the year associated with the level of activity of the units participating in the cap and the baseline that is established for modeling emissions at the time the regulations are developed. The cap is then based on that year.

*Section 117.425, Alternative Case Specific Specifications*

The commission revises existing §117.425(a), which provides procedures concerning alternative case specific specifications, by including new section cross-references to new §117.405(d) and a corrected reference to §117.410(c). Adopted revisions to paragraph (2) include a section cross-reference to new §117.405.

*Section 117.430, Operating Requirements*

The commission revises existing §117.430, which establishes operating requirements for sources subject to revised Subchapter B, Division 4. Adopted revised subsection (b) adds a

section cross-reference to new §117.405. Additional changes to revised subsection (b) include deleting the reference to existing §117.410(a) and (b) and adding a reference to revised §117.410.

*Section 117.435, Initial Demonstration of Compliance*

The commission adopts revisions to existing §117.435, which details the monitoring and testing procedures required to demonstrate compliance with the emission specifications of Subchapter B, Division 4. Adopted revised §117.435(c) replaces the reference to "relative accuracy test audit" (RATA) with the more general term, "monitor certification." This change clarifies that verification of operational status must include completion of the initial monitor certification, which includes not only the RATA but also the seven-day drift test.

*Section 117.440, Continuous Demonstration of Compliance*

Adopted revisions to §117.440(a)(1), which details the list of units that will be subject to the fuel metering requirements of revised §117.440(a), adds a section cross-reference to new §117.405, concerning emission specifications for RACT. The commission is also clarifying that operation of the totalizing fuel flow meter in conjunction with the unit operating time is not time averaged over a calendar year but instead continuous operating time during a calendar year that is representative of the total fuel meter operating time. This total fuel meter operating time must still be at least 95% of the time that the unit operates. In addition, the commission adopts revised §117.440(a)(1)(A) to provide an exemption for wood-fired boilers to the fuel flow metering requirements of existing subsection (a)(1).

Instead of installing and operating a totalizing fuel flow meter, owners or operators of wood-fired boilers in the 10-county DFW 2008 eight-hour ozone nonattainment area will demonstrate compliance with the monitoring provisions of revised Subchapter B, Division 4 through either fuel use records that will be required in adopted revised §117.445(f) or the alternative monitoring provision of existing §117.440(a)(2)(A). As mentioned previously in this preamble, the one wood-fired boiler identified in Kaufman County currently operates with SCR and a NO<sub>x</sub> CEMS.

Provisions in existing subsection (c) specify the units for which owners and operators shall install and operate a CEMS or PEMS to monitor NO<sub>x</sub> exhaust, criteria for exempt units, and methods to be used to provide substitute emissions compliance data during periods when the NO<sub>x</sub> monitors are offline. Adopted revisions to subsection (c)(1) include adding section cross-references to new §117.405(a) and (b) and revised §117.410(a) and deleting references to existing §117.410(b). Adopted revised §117.440(d), concerning ammonia monitoring requirements, adds section cross-references to new §117.405(a) and (b) and new §117.410(a) and deletes a reference to existing §117.410(b). In addition, the commission adds a reference to new §117.405(d)(2) to be consistent with the new §117.405.

During the rulemaking proposal, the commission requested comments on alternatives, such as periodic testing, to the existing provisions of the NO<sub>x</sub> monitoring requirements of existing §117.440(c) for ceramic tile kilns. The commission received comments for changes to existing §117.440(c); however, the commission made no changes in response to these

comments. Existing subsection (c) requires owners or operators of a ceramic kiln to install, calibrate, maintain, and operate a CEMS or PEMS to monitor exhaust NO<sub>x</sub>.

Adopted revised §117.440(j), concerning data used for compliance, specifies that the methods required in adopted §117.440 must be used to demonstrate compliance with the emission specifications after the initial demonstration of compliance required by revised §117.435. The commission adds references to new §117.405(a) and (b) and new §117.410(a) and deletes the reference to existing §117.410(b).

Finally, adopted revised §117.440(k) specifies the testing and retesting requirements for units subject to the emission specifications of new §117.405(a) or (b) or revised §117.410(a). The commission deletes existing paragraph (1), which has now been made obsolete by the passing of compliance dates in existing §117.9030(a) and also contains provisions for units subject to existing §117.410(a). The amendment of paragraph (1) will be concurrent with the adopted amendment of existing §117.410(a) and existing §117.9030(a), concerning IOP emission specifications. The commission moves existing subsection (k)(2) to subsection (k)(1). In addition, the commission adds new references to new §117.405(a) and (b) and revised §117.410(a) and removes the reference to existing §117.410(b). Adopted new paragraph (1) requires the owner or operator of units subject to the emission specifications of new §117.405(a) or (b) or revised §117.410(a) to test the units as specified in revised §117.435, "Initial Demonstration of Compliance," in accordance with the schedule specified in adopted revised §117.9030. The commission moves existing paragraph (3) to adopted

paragraph (2). Adopted changes also include references to new §117.405(a) and (b) and revised §117.410(a) with removal of the reference to existing §117.410(b). Amended subsection (k)(2) is a retesting requirement for owners or operators to retest any unit subject to the emission specifications of new §117.405(a) or (b) or revised §117.410(a) after any modification that could be reasonably expected to increase the NO<sub>x</sub> emission rate. This adopted retesting provision applies to units that are not equipped with CEMS or PEMS to monitor NO<sub>x</sub> emissions.

*Section 117.445, Notification, Recordkeeping, and Reporting Requirements*

The commission is removing the requirements in existing §117.445(b)(1) and (2), which specify the notification requirements for units subject to the emission specifications of existing §117.410(a) and (b), respectively. As mentioned elsewhere in the Section by Section Discussion of this preamble, existing §117.410(a) is concurrently amended due to the passing of compliance dates in existing §117.9030(a) and because affected units of existing §117.410(a) are now subject to emission specifications in existing §117.410(b), which is also concurrently moved to revised §117.410(a). In addition, the commission amends §117.445(b) to contain the provisions of existing §117.445(b)(2), which detail the notification requirements for units subject to existing §117.410(b). Adopted §117.445(b) will also include section cross-references to new §117.405(a) and (b) and revised §117.410(a). Under new subsection (b), written notice is required at least 15 days in advance of the date of any CEMS or PEMS performance evaluation conducted under revised §117.440 or stack test conducted under revised §117.435.

Adopted §117.445(e), which specifies the semiannual reporting requirements for owners or operators of any gas-fired engines, includes a section cross-reference to new §117.405.

Written reports of excess emissions and the air-fuel ratio monitoring system performance must be submitted to the executive director.

Adopted §117.445(f) specifies requirements for written or electronic records for owners or operators of units subject to the requirements of this division. Adopted subsection (f)(4), which specifies that records of monthly hours of operation must be maintained for units claiming an exemption based on hours per year of operation, includes section cross-references to revised §117.403(b)(2)(D) to reflect adopted changes in §117.403. The commission clarifies that owners or operators of stationary gas turbines are also required to maintain records of the purpose of unit operation, such as the identification of the type of emergency situation.

The commission revises existing subsection (f)(9) to clarify that records retention of each time a stationary diesel or dual-fuel engine is operated for testing and maintenance refers to testing and maintenance of the diesel or dual-fuel engine itself. Finally, adopted §117.445(f)(10) updates the existing section cross-reference from existing §117.410(b)(7)(A)(ii) to revised §117.410(a)(7)(A)(ii), to coincide with the amendment of existing §117.410(a) and the re-lettering of existing §117.410(b) to §117.410(a).

*Section 117.450, Initial Control Plan Procedures*

The commission revises existing §117.450, concerning the requirements and procedures for submitting an initial control plan. The commission adopts in §117.450(a), (a)(1), (1)(C), and (2) section cross-references to new §117.405(a) and (b) and revised §117.410(a) and deletes references to existing §117.410(b). Adopted §117.450(a) requires the owner or operator of any unit at a major source of NO<sub>x</sub> in the 10-county DFW area that is subject to new §117.405(a) or (b) or revised §117.410(a) to submit an initial control plan and lists the content requirements for the initial control plans. Sources in the nine-county DFW area already subject to §117.410 were previously required to submit the initial control plans. Sources subject to adopted new §117.405 will be required to submit initial control plans by the applicable compliance date.

The commission revises existing subsection (b) to update the section cross-reference from existing §117.9030(b) to adopted §117.9030. Adopted §117.450(b) specifies that the initial control plan must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for initial control plans in revised §117.9030.

Finally, the commission deletes existing §117.450(c), which specifies that for units located in Dallas, Denton, Collin, and Tarrant Counties, subject to existing Subchapter B, Division 2, the owner or operator may elect to submit the most recent revision of the final control plan required by repealed §117.254 in lieu of the initial control plan required by existing

subsection (a). The adopted deletion of §117.450(c) is concurrent with the adopted repeal of existing Subchapter B, Division 2 due to the passing of compliance dates and because sources of NO<sub>x</sub> previously subject to Subchapter B, Division 2 are now required to comply with more stringent rules in existing Subchapter B, Division 4.

*Section 117.452, Final Control Plan Procedures for Reasonably Available Control Technology*

The commission adopts new §117.452 requiring the owner or operator of any unit subject to adopted new §117.405(a) or (b) at a major source of NO<sub>x</sub> to submit a final control report to show compliance with the requirements of new §117.405. Adopted new §117.452(a)(1) - (5) specifies the content requirements of the report. The final control report must identify which sections are used to demonstrate compliance. The report must include: the method of NO<sub>x</sub> control for each unit; the emissions measured by testing required in adopted revised §117.435; and the specific rule citation for any unit with a claimed exemption from the emission specifications of adopted new §117.405(a) or (b). In addition, if a compliance stack test report or monitor certification report required by adopted revised §117.435 is not being submitted concurrently with the final control report, the final control report must include the date the compliance stack test report or monitor certification report was submitted and whether the compliance stack test report or the monitor certification report was sent to the central office, the regional office, or both offices.

Adopted new §117.452(b)(1) - (3) specifies that for sources complying with revised §117.423

in addition to the requirements of new subsection (a), the owner or operator shall submit: the calculations used to calculate the 30-day average and maximum daily source cap allowable emission rates; the average daily heat input, variable  $H_i$ , specified in revised §117.423(b)(1); the maximum daily heat input, variable  $H_{mi}$ , specified in revised §117.423(b)(2); the method of monitoring emissions; the method of providing substitute emissions data when the  $NO_x$  monitoring system is not providing valid data; and an explanation of the basis of the values of variables  $H_i$  and  $H_{mi}$ .

Adopted new §117.452(c) specifies the report must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for final control plans in revised §117.9030(a). The plan must be updated with any emission compliance measurements submitted for units using a CEMS or PEMS and complying with the source cap rolling 30-day average emission limit, according to the applicable schedule in revised §117.9030(a).

*Section 117.454, Final Control Plan Procedures for Attainment Demonstration Emission Specifications*

The commission adopts revisions to existing §117.454 requiring the owner or operator of any unit subject to revised §117.410 at a major source of  $NO_x$  to submit a final control report to show compliance with the requirements of revised §117.410. Adopted §117.454(a)(4) updates the reference to "relative accuracy test audit" to "monitor certification," consistent with the concurrently amended revision to §117.435(c). Adopted

§117.454(b)(2)(B) corrects a section cross-reference from §117.423(b)(1) to §117.423(b)(2), for sources choosing the source cap compliance option.

Finally, adopted §117.454(c) specifies the report must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for final control plans in revised §117.9030.

*Section 117.456, Revision of Final Control Plan*

The commission adopts revisions to existing §117.456 by adding in paragraph (1) a section cross-reference to new §117.405. The section specifies the conditions under which a revised final control plan may be submitted by the owner or operator, along with any required permit applications. Paragraphs (1) - (3) specify that such a plan must adhere to the requirements and the final compliance dates of the division; and that for sources complying with new §117.405 or revised §117.410, replacement new units may be included in the control plan. In addition, for sources complying with revised §117.423, any new unit must be included in the source cap if the unit belongs to an equipment category that is included in the source cap.

*SUBCHAPTER C: COMBUSTION CONTROL AT MAJOR UTILITY ELECTRIC*

*GENERATION SOURCES IN OZONE NONATTAINMENT AREAS*

*DIVISION 2: DALLAS-FORT WORTH OZONE NONATTAINMENT AREA UTILITY*

*ELECTRIC GENERATION SOURCES*

The commission adopts the repeal of existing Subchapter C, Division 2, which has been made obsolete by the passing of compliance dates because sources of NO<sub>x</sub> previously subject to this division are now required to comply with more stringent rules in existing Subchapter C, Division 4.

*DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE NONATTAINMENT AREA  
UTILITY ELECTRIC GENERATION SOURCES*

To address new RACT requirements for sources of NO<sub>x</sub> located in Wise County, the commission adopts revisions in Subchapter C, Division 4, that will revise existing rule language and requirements associated with any major utility electric generation source of NO<sub>x</sub> in the 10-county DFW 2008 eight-hour ozone nonattainment area. The definition of a major source of NO<sub>x</sub> in Wise County is in adopted §117.10(29)(C) and includes any stationary source or group of sources located within a contiguous area and under common control that emits or has the PTE 100 tpy of NO<sub>x</sub>.

*Section 117.1303, Exemptions*

Adopted revisions to §117.1303 clarify exemption criteria of units that will be exempt from specified requirements of adopted revised Subchapter C, Division 4. The commission adopts removal of the existing exemption in §117.1303(a)(1), which applies to any new auxiliary steam boiler or stationary gas turbine placed into service after November 15, 1992. This revision is adopted to make the utility rules that apply to gas turbines in the DFW area consistent with the major source industrial rules in the DFW area and to provide a simpler

RACT demonstration for the affected utility sources. Affected auxiliary steam boilers and gas turbines will be required to meet the NO<sub>x</sub> emission specifications and monitoring and testing requirements, which are not changed in revised Subchapter C, Division 4. Based on a TCEQ review of the 2012 EI and available air permit information, the TCEQ expects that all existing auxiliary steam boilers in the nine counties of the DFW 1997 eight-hour ozone nonattainment area were constructed prior to the exemption date of November 15, 1992. Therefore, the exemption in §117.1303(a)(1) did not apply to these existing units; and no impact is expected as a result of the adopted repeal of the exemption. New units will either qualify for the existing exemption in §117.1303(a)(2) based on annual heat input or will be required to comply with the provisions of revised Subchapter C, Division 4. No auxiliary steam boilers were identified in Wise County.

After reviewing the 2012 EI and available air permit information for all existing gas turbines in the nine counties of the DFW 1997 eight-hour ozone nonattainment area, the TCEQ has concluded that all existing gas turbines in the nine counties of the DFW area were placed into service after November 15, 1992. Although the adopted removal of the exemption in §117.1303(a)(1) will affect these existing units, all of the affected turbines already meet the NO<sub>x</sub> emission specifications and monitoring requirements of revised Subchapter C, Division 4. Existing monitoring provisions require owners or operators of units subject to the NO<sub>x</sub> emission specifications to install, calibrate, maintain, and operate a NO<sub>x</sub> emissions monitoring system. Because these units already meet the NO<sub>x</sub> emission specifications and monitoring requirements of Subchapter C, Division 4, the commission

does not expect adverse impacts to owners or operators of affected units in the nine counties of the DFW area as a result of deleting the requirement in §117.1303(a)(1). New units will either qualify for the existing exemption in §117.1303(a)(3)(B) based on unit operating hours or will be required to comply with the provisions of revised Subchapter C, Division 4. One utility electric generation source in Wise County was identified as an affected source. Based on 2012 EI information, this source already meets the NO<sub>x</sub> emission specifications and monitoring requirements of adopted revised Subchapter C, Division 4. The remaining paragraphs will be renumbered accordingly.

The commission revises the operating hours limit for exemption criteria for stationary gas turbines and stationary internal combustion engines in adopted §117.1303(a)(2)(B) from a rolling 12-month average to a rolling 12-month basis. The owner or operator of an affected unit will sum all operating hours for a consecutive 12-month period, and continue doing so on a rolling 12-month basis, as opposed to calculating the average of all operating hours during a consecutive 12-month period. This will more accurately reflect the intent of the rule and how an affected unit will demonstrate compliance with the operating restriction of a total of 850 hours per year.

*Section 117.1310, Emission Specifications for Eight-Hour Attainment Demonstration*

Adopted §117.1310(b) establishes emission specifications of related emissions for units that are subject to the emission specifications of subsection (a) of this section. The commission adopts deletion of existing §117.1310(b)(1) and (2) due to removing an ammonia emission

specification found in existing subsection (b)(2)(B) and the restructuring of subsection (b) that will be necessary to conform to current *Texas Register* formatting requirements.

Existing paragraph (2) specifies ammonia emission specifications for units that are subject to the NO<sub>x</sub> emission specifications of §117.1310(a). Existing paragraph (2)(A) applies only to units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control while existing paragraph (2)(B) applies to all other units. Existing §117.1310(b)(2)(B) cites a RACT emission specification for ammonia that is now obsolete, and the commission contends that an ammonia emission specification is needed only for units that use urea or ammonia for control of NO<sub>x</sub> emissions.

In restructuring subsection (b), the commission moves the existing provisions of §117.1310(b)(1)(A) to adopted §117.1310(b)(1)(A) and (B). The existing provisions of §117.1310(b)(1)(B) are moved to adopted §117.1310(b)(2). The existing provisions of §117.1310(b)(2)(A) are moved to adopted §117.1310(b)(3)(A) and (B).

#### *Section 117.1325, Alternative Case Specific Specifications*

Minor stylistic, non-substantive changes are adopted in existing subsection (a). No other changes are adopted.

#### *Section 117.1335, Initial Demonstration of Compliance*

The commission adopts §117.1335(d)(4) to specify the monitoring procedures to be followed for units complying with a NO<sub>x</sub> emission specification in lb/MMBtu on a block

one-hour average. Existing rule provisions address monitoring procedures for units complying with a NO<sub>x</sub> emission specification in lb/MMBtu on a rolling 30-day average and on a rolling 24-hour average; however, they do not address how units must comply with a NO<sub>x</sub> emission specification in lb/MMBtu on a block one-hour average. The commission renumbers existing paragraph (4) to paragraph (5). In addition, the commission adopts a paragraph (6) to specify the monitoring procedures to be followed for units complying with a NO<sub>x</sub> emission specification in lb/MMBtu on a rolling 168-hour average. Similar to the approach for adopted subsection (d)(4), existing rule provisions do not address how units must comply with a NO<sub>x</sub> emission specification in lb/MMBtu on a rolling 168-hour average. The adopted revision specifies that the 168-hour average emission rate is calculated using the equation in §117.1310(a)(1)(D). In addition, the commission clarifies that the system-wide heat input weighted average is calculated for each hour, and the average of that hourly data during the 168-hour test period is used to demonstrate compliance. Finally, the commission renumbers existing paragraph (5) to paragraph (7).

*Section 117.1340, Continuous Demonstration of Compliance*

The commission adopts changes to existing §117.1340, which details the operating, monitoring, and testing procedures required by owners or operators of units subject to the emission specifications of adopted revised §117.1310 in order to demonstrate continuous compliance. Adopted §117.1340(c), concerning ammonia monitoring requirements, updates a reference from existing §117.1310(b)(2)(A) and to §117.1310(b)(3) to coincide with the changes adopted in §117.1310(b). Alternative NO<sub>x</sub> monitoring provisions for auxiliary

steam boilers are provided in existing subsection (f). Adopted revisions to §117.1340(f) include rule language to clarify that the alternative monitoring provisions for using a CEMS apply to monitoring only NO<sub>x</sub> emissions. Adopted revised §117.1340(h)(2) includes additional rule language to clarify that stationary gas turbines that are not rated less than 30 megawatts or that are not peaking gas turbines that use steam or water injection must use either a CEMS or PEMS to comply with the monitoring requirements for stationary gas turbines that are subject to the stationary gas turbine emission specifications of §117.1310.

*Section 117.1345, Notification, Recordkeeping, and Reporting Requirements*

Adopted subsection (d) specifies the semiannual reporting requirements for owners or operators of units using a CEMS, PEMS, or steam-to-fuel or water-to-fuel ratio monitoring system under adopted revised §117.1340. Adopted changes to subsection (d)(5) add a PEMS to the list of monitoring systems for which the owner or operator must submit a summary report and an excess emission report if the monitoring system downtime for the reporting period is greater than or equal to 5.0% of the total unit operating time for the reporting period. Adopted revised subsection (e)(3) also clarifies that the owner or operator of each unit subject to the requirements of the division shall maintain records of the quantity and type of each fuel burned in the unit. All other adopted changes to existing §117.1345 are minor stylistic, non-substantive changes.

*Section 117.1350, Initial Control Plan Procedures*

The commission deletes existing subsection (c), which contains references to existing

§117.1110 and §117.1154, concurrently adopted for repeal, to be consistent with the adopted repeal of existing Subchapter C, Division 2.

*Section 117.1354, Final Control Plan Procedures for Attainment Demonstration Emission Specifications*

Adopted §117.1354 requires the owner or operator of utility boilers listed in §117.1300 at a major source of NO<sub>x</sub> to submit a final control plan to show compliance with the requirements of revised §117.1310. Adopted §117.1354(a)(3) updates the reference to "relative accuracy test audit" to "monitor certification" consistent with the language in §117.1335(c). All other changes are minor revisions to update TCEQ office names and references.

*SUBCHAPTER G: GENERAL MONITORING AND TESTING REQUIREMENTS*

*DIVISION 1: COMPLIANCE STACK TESTING AND REPORT REQUIREMENTS*

*Section 117.8000, Stack Testing Requirements*

The commission adopts §117.8000(e) to establish emission testing provisions for boilers and process heaters that are used on a temporary basis and are therefore installed or relocated to an account to be operated for a brief period of time. The owner or operator of a site that temporarily brings a unit on-site for short periods of time will not have sufficient amount of time to perform the testing requirements of the rule. These adopted requirements will be applicable to affected units in all areas covered by Chapter 117.

Adopted subsection (e) will provide compliance flexibility to owners or operators that use

temporary boilers or process heaters for less than 60 consecutive calendar days by allowing the owner or operator to use previous stack test results conducted on the boiler or process heater or a manufacturer's guarantee of performance. The previous testing results or manufacturer's guarantee must be for the unit that will be newly installed at the account and not testing results or manufacture's guarantee of performance for a similar unit make or model. For the purposes of this adopted subsection, the term "relocate" or "relocated" means to newly install at an account, as defined in §101.1, Definitions, a boiler or process heater from anywhere outside of that account. Adopted subsection (e)(1) specifies that if previous testing results are used, testing must have been conducted on the same boiler or process heater in accordance with §117.8000(b) - (d). In addition, the owner or operator of the site temporarily installing the unit shall maintain a record of the previous test report as specified by the recordkeeping requirements under Chapter 117 applicable to the site.

Adopted subsection (e)(2) specifies that the owner or operator shall physically remove the unit from the account no later than 60 consecutive calendar days after installing the unit at the account. If the owner or operator chooses not to physically remove the unit from the account, the owner or operator shall comply with the testing requirements as specified in §117.8000(b) - (d). Lastly, extensions to the 60 consecutive calendar days limitation of adopted subsection (e) will not be provided. This is to prevent circumvention of satisfying the applicable initial demonstration of compliance and testing requirements that will otherwise apply to the affected stationary boiler or stationary process heater subject to Chapter 117. In addition, the commission does not anticipate that these affected units will

be using a CEMS or PEMS for demonstrating compliance with the requirements of Chapter 117.

*SUBCHAPTER H: ADMINISTRATIVE PROVISIONS*

*DIVISION 1: COMPLIANCE SCHEDULES*

*Section 117.9010, Compliance Schedule for Dallas-Fort Worth Ozone Nonattainment Area Major Sources*

The commission adopts the repeal of existing §117.9010, which has been made obsolete by the passing of compliance dates because sources of NO<sub>x</sub> previously subject to this section are now required to comply with more stringent rules in adopted revised §117.9030.

*Section 117.9030, Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources*

The commission adopts deletion of existing §117.9030(a), concerning compliance schedule for IOP emission specifications. With the passing of the compliance date for eight-hour ozone attainment demonstration emission specifications in existing §117.9030(b), these gas-fired engines are now subject to emission specifications for eight-hour ozone attainment demonstration in existing §117.410(b), which the commission adopts as revised §117.410(a).

The commission adopts §117.9030(a), concerning RACT emission specifications, to specify the compliance schedule requirements for units subject to the emission specifications of

adopted new §117.405(a) and (b). Adopted §117.9030(a)(1) requires the owner or operator of any stationary source of NO<sub>x</sub> in the 10-county DFW 2008 eight-hour ozone nonattainment area that is a major source of NO<sub>x</sub> and is subject to new §117.405(a) or (b) to submit the initial control plan required by adopted revised §117.450 no later than June 1, 2016, and to comply with all other requirements of adopted revised Subchapter B, Division 4 as soon as practicable but no later than January 1, 2017. Adopted §117.9030(a)(2) specifies that the owner or operator of any stationary source of NO<sub>x</sub> that becomes subject to the requirements of adopted revised Subchapter B, Division 4 on or after January 1, 2017, shall comply with the requirements of Subchapter B, Division 4 as soon as practicable but no later than 60 days after becoming subject. For example, new units placed into service after January 1, 2017, will be required to comply within 60 days after startup of the unit. Existing units previously exempt from the rule but no longer qualifying for that exemption after January 1, 2017, will be required to comply with the adopted rule no later than 60 days after the unit no longer qualifies for the exemption.

Adopted §117.9030(a)(3) specifies that if Wise County is not designated a nonattainment county as part of the DFW 2008 eight-hour ozone nonattainment area, an owner or operator of any unit located at a major stationary source of NO<sub>x</sub> located in Wise County will not be required to comply with the applicable requirements of adopted revised Subchapter B, Division 4. The commission will publish notice of a change in nonattainment status for Wise County in the *Texas Register*. This change is adopted because Texas is currently in litigation over the inclusion of Wise County in the DFW 2008 eight-hour ozone

nonattainment area, as discussed elsewhere in this preamble. As the commission cannot predict the outcome of this litigation at this time, the commission is adopting rules that will ensure that sources within Wise County will be properly accounted for in the DFW 2008 attainment demonstration SIP. In response to comments received, the commission is replacing the proposed language "Wise County is no longer designated nonattainment for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard" in §117.9030(a)(3) with "the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective."

Adopted revisions to existing §117.9030(b), concerning eight-hour ozone attainment demonstration emission specifications, include updates to section cross-references.

Adopted revised §117.9030(b)(1), (1)(B), (B)(i) and (ii) include deleting the references to existing §117.410(b) and adopting references to §117.410(a). Adopted paragraph (1)(C) deletes the reference to existing §117.410(g) and adds a reference to adopted §117.410(f).

*Section 117.9110, Compliance Schedule for Dallas-Fort Worth Ozone Nonattainment Area  
Utility Electric Generation Sources*

The commission adopts the repeal of existing §117.9110, which has been made obsolete by the passing of compliance dates because sources of NO<sub>x</sub> previously subject to this section are now required to comply with more stringent rules in adopted revised §117.9130.

*Section 117.9130, Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone*

*Nonattainment Area Utility Electric Generation Sources*

Adopted §117.9130 specifies the compliance schedule for owners or operators of electric utilities subject to adopted revised Subchapter C, Division 4. Adopted subsection (a), which specifies the compliance schedule for existing electric utilities subject to the existing rule, deletes a reference to the existing DFW eight-hour ozone nonattainment area and adopts the following new list of counties: Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties. This change is adopted to be consistent with the adopted revised definition of DFW eight-hour ozone nonattainment area in §117.10 and to distinguish between the existing compliance schedule for sources currently subject to the rule and those that will be newly subject by the adopted rulemaking.

The commission adopts §117.9130(b) to detail the compliance schedule for auxiliary steam boilers and stationary gas turbines located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties that will be affected by the adopted amendment to the existing exemption in §117.1303(a)(1). Affected auxiliary steam boilers and stationary gas turbines will be units that were placed into service after November 15, 1992; and these affected units will be required to meet the NO<sub>x</sub> emission specifications and monitoring and testing requirements, which are not changed in adopted revised Subchapter C, Division 4. Adopted §117.9130(b)(1) requires the owner or operator to submit the initial control plan required by revised §117.1350 by no later than June 1, 2016. Adopted §117.9130(b)(2) specifies that the owner or operator must comply with all other requirements of adopted revised Subchapter C, Division 4 as soon as practicable but no

later than January 1, 2017.

The commission adopts §117.9130(c) to detail the compliance schedule for electric utilities located in Wise County subject to the adopted rule. Adopted §117.9130(c)(1) requires the owner or operator to submit the initial control plan required by adopted revised §117.1350 by no later than June 1, 2016. Adopted subsection (c)(2) specifies that the owner or operator must comply with all other requirements of adopted revised Subchapter C, Division 4 as soon as practicable but no later than January 1, 2017. The commission moves existing subsection (b) to adopted subsection (d).

Adopted §117.9130(d) specifies that for electric utilities in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County that become subject to Subchapter C, Division 4 on or after March 1, 2009, and for electric utilities in Wise County that become subject to Subchapter C, Division 4 on or after January 1, 2017, the owner or operator must comply as soon as practicable but no later than 60 days after becoming subject.

Finally, adopted §117.9130(e) specifies that if Wise County is not designated a nonattainment county as part of the DFW 2008 eight-hour ozone nonattainment area, an owner or operator of an electric utility located in Wise County will not be required to comply with the applicable requirements of adopted revised Subchapter C, Division 4. The commission will publish notice of a change in nonattainment status for Wise County in the *Texas Register*. This change is adopted because Texas is currently in litigation over the

inclusion of Wise County in the DFW 2008 eight-hour ozone nonattainment area, as discussed elsewhere in this preamble. As the commission cannot predict the outcome of this litigation at this time, the commission is adopting rules that will ensure that sources within Wise County will be properly accounted for in the DFW 2008 attainment demonstration SIP. In response to comments received, the commission is replacing the proposed language "Wise County is no longer designated nonattainment for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard" in §117.9130(e) with "the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective."

*DIVISION 2: COMPLIANCE FLEXIBILITY*

*Section 117.9800, Use of Emission Credits for Compliance*

Adopted §117.9800 includes section cross-reference updates to be consistent with adopted repeal of Subchapter B, Division 2, and Subchapter C, Division 2. The commission adopts revisions to existing subsections (a)(1) - (5), (b), and (d) to reflect adopted changes in the other subchapters. Adopted subsection (a)(1) will also add a section cross-reference to adopted new §117.405.

*Section 117.9810, Use of Emission Reductions Generated from the Texas Emissions Reduction Plan (TERP)*

The commission adopts revisions to existing §117.9810, which will remove cross-references to be consistent with the adopted repeal of Subchapter B, Division 2, and Subchapter C,

Division 2 and renumber paragraphs accordingly. Adopted revised subsection (a)(1) will add a new reference to adopted new §117.405. The commission rennumbers existing subsection (a)(6) to adopted subsection (a)(2) to reflect the deletion of subsection (a)(2) - (5).

### **Final Regulatory Impact Determination**

The commission reviewed the adopted rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the adopted rulemaking meets the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted rulemaking does not, however, meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state

law.

The state previously adopted RACT rules for NO<sub>x</sub> sources in most of the DFW area as part of the SIP for the 1997 eight-hour ozone standard. On March 27, 2008, the EPA revised both the primary and secondary ozone standard (the eight-hour ozone NAAQS) to a level of 0.075 ppm with an effective date of May 27, 2008 (73 FR 16436). On May 21, 2012, the EPA established initial air quality designations for the 2008 eight-hour ozone NAAQS. Effective July 20, 2012, the DFW 2008 eight-hour ozone nonattainment area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, was classified as a moderate nonattainment area for the 2008 eight-hour ozone NAAQS. Nonattainment areas classified as moderate and above are required to meet the mandates of the FCAA under §172(c)(1) and §182(f). FCAA, §172(c)(1) requires that the SIP incorporate all reasonably available control measures, including 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 NO<sub>x</sub>. The adopted rulemaking will revise Chapter 117 to implement RACT for all major sources of NO<sub>x</sub> in the DFW area as required by FCAA, §172(c)(1) and §182(f). The adopted rulemaking will also extend implementation of RACT to major sources of NO<sub>x</sub> located in Wise County, which was classified as unclassifiable/attainment under the 1997 eight-hour ozone standard but is now classified as nonattainment. The commission adopts rules that will allow the commission to remove the applicability of RACT requirements to sources in Wise County, if Wise County was to be removed from the DFW 2008 ozone nonattainment area. These specific changes are

adopted because Texas is currently in litigation over the inclusion of Wise County in the DFW 2008 eight-hour ozone nonattainment area, as discussed elsewhere in this preamble. As the commission cannot predict the outcome of this litigation at this time, the commission adopts rules that will ensure that sources within Wise County will be properly accounted for in the DFW 2008 attainment demonstration SIP. The adopted new rules update RACT requirements for the following source categories in Chapter 117: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas, Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources; Combustion Control at Major Utility Electric Generation Sources in Ozone Nonattainment Areas, Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources. The adopted rules also modify and update definitions; general monitoring and testing requirements; emission monitoring requirements; and administrative, scheduling, and compliance requirements.

The adopted rulemaking implements requirements of 42 USC, §7410, which requires states to adopt a SIP that provides for the implementation, maintenance, and enforcement of the NAAQS in each air quality control region of the state. While 42 USC, §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, the SIP must include enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter (42 USC,

Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410 and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. The adopted rulemaking would revise Chapter 117 to implement RACT for all major sources of NO<sub>x</sub> in the DFW area as required by FCAA, §172(c)(1) and §182(f).

The requirement to provide a fiscal analysis of adopted regulations in the Texas Government Code was amended by Senate Bill (SB) 633 during the 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, a delegated federal program or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 concluding that "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission

also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted adopted rules from the full analysis unless the rule was a major environmental rule that exceeded a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule adopted for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the SIP rules will have a broad impact, the impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required

by federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995); *writ denied with per curiam opinion respecting another issue*, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App. Austin 1990, *no writ*); *Cf. Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Dudney v. State Farm Mut. Auto Ins. Co.*, 9 S.W.3d 884, 893 (Tex. App. Austin 2000); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App. Austin 2000, *pet. denied*); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." The legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government

Code, §2001.0225.

The specific intent of the adopted rulemaking is to protect the environment and reduce the risks to human health by requiring control measures for NO<sub>x</sub> emission sources that have been determined by the commission to be RACT for the DFW area. These revisions will result in NO<sub>x</sub> emission reductions in the DFW 2008 eight-hour ozone nonattainment area, which may contribute to the timely attainment of the 2008 eight-hour ozone NAAQS and reduce public exposure to NO<sub>x</sub>. The adopted rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this adopted rulemaking. Therefore, this adopted rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because although the adopted rulemaking meets the definition of a "major environmental rule," it does not meet any of the four applicability criteria for a major environmental rule.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No comments were received regarding the draft regulatory impact analysis determination.

### **Takings Impact Assessment**

The commission evaluated the adopted rulemaking and performed an assessment of whether Texas Government Code, Chapter 2007, is applicable. The specific purpose of the

adopted rulemaking is to implement RACT for all NO<sub>x</sub> emission sources in the 2008 eight-hour ozone DFW nonattainment area, as required by FCAA, §172(c)(1) and §182(f). Texas Government Code, §2007.003(b)(4), provides that Texas Government Code, Chapter 2007 does not apply to this adopted rulemaking because it is an action reasonably taken to fulfill an obligation mandated by federal law.

In addition, the commission's assessment indicates that Texas Government Code, Chapter 2007 does not apply to these adopted rules because this is an action that is taken in response to a real and substantial threat to public health and safety; that is designed to significantly advance the health and safety purpose; and that does not impose a greater burden than is necessary to achieve the health and safety purpose. Thus, this action is exempt under Texas Government Code, §2007.003(b)(13). The adopted rules fulfill the FCAA requirement to implement RACT in nonattainment areas. These revisions will result in NO<sub>x</sub> emission reductions in ozone nonattainment areas that may contribute to the timely attainment of the 2008 eight-hour ozone NAAQS and reduce public exposure to NO<sub>x</sub>. Consequently, the adopted rulemaking meets the exemption criteria in Texas Government Code, §2007.003(b)(4) and (13). For these reasons, Texas Government Code, Chapter 2007 does not apply to this adopted rulemaking.

### **Consistency with the Coastal Management Program**

The commission reviewed the adopted rulemaking and found the adoption is a rulemaking identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2),

relating to rules subject to the Texas Coastal Management Program (CMP), and will, therefore, require that goals and policies of the CMP be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the rulemaking will not affect any coastal natural resource areas because the rules only affect counties outside the CMP area and is, therefore, consistent with CMP goals and policies.

The commission invited public comment regarding the consistency with the CMP during the public comment period. The commission received no comments on the CMP.

### **Effect on Sites Subject to the Federal Operating Permits Program**

Chapter 117 is an applicable requirement under 30 TAC Chapter 122, Federal Operating Permits Program. Owners or operators subject to the federal operating permit program must, consistent with the revision process in Chapter 122, upon the effective date of the rulemaking, revise their operating permit to include the new Chapter 117 requirements.

### **Public Comment**

The commission held two public hearings on the proposal: one in Arlington on January 15, 2015, and a second hearing in Austin on January 22, 2015. The comment period closed on

February 11, 2015. The commission received written comments regarding the Chapter 117 NO<sub>x</sub> RACT rulemaking from Dal-Tile, the EPA, Luminant, Solar Turbines Incorporated (Solar), Texas Pipeline Association (TPA), and one individual.

### **Response to Comments**

#### **Comment**

Dal-Tile requested that the TCEQ remove ceramic tile kilns as a specified named source in §117.440(c)(1)(F). Dal-Tile commented that monitoring exhaust NO<sub>x</sub> in order to demonstrate ongoing compliance with NO<sub>x</sub> standards would be more accurately and properly demonstrated with periodic stack testing instead of with the existing requirement to use either a CEMS or a PEMS. Dal-Tile commented it was the only company operating ceramic tile kilns in the DFW area and due to naturally occurring trace elements in the raw materials used to produce ceramic tile, the nature of the exhaust from the ceramic kilns resulted in aggressive corrosion of the CEMS units. This also resulted in a very high degree of maintenance and repairs, coupled with significant downtime of the CEMS units, which in turn affected the accuracy and reliability of the CEMS units. Dal-Tile further commented the data from the CEMS units could not be considered high quality due to the amount of downtime and frequency of calibration adjustments. Dal-Tile commented these issues were ongoing for all of the CEMS units on the kilns. The requirement to use a CEMS or a PEMS on ceramic kilns did not provide any public benefit, enhance protection of the environment, or provide efficient and equitable administration of the NO<sub>x</sub> emission standard. Dal-Tile also commented that their kilns met the definition of a Low-Mass Emission (LME) unit in

40 CFR Part 75 and, therefore, met the qualifications for using the LME methodology in lieu of using a CEMS, as allowed by the EPA in 40 CFR Part 75.

### **Response**

**The commission solicited comment in the proposed rulemaking ((39 TexReg 10344) December 26, 2014, issue of the *Texas Register*) on the issue of continuous NO<sub>x</sub> monitoring for ceramic kilns, including the possibility of alternatives such as periodic testing. The commission adopted the continuous NO<sub>x</sub> monitoring requirement for ceramic kilns in the DFW area in 2007 due to the potential variability in emissions from ceramic kilns. The NO<sub>x</sub> monitoring requirements exist to ensure that actual measured data from monitoring for major sources of NO<sub>x</sub> can be used for comparison to and compliance with the applicable NO<sub>x</sub> emission limit. Based on the information provided by the commenter, the commission acknowledges that some technical challenges could exist for the use of CEMS at the current location where the commenter has installed the CEMS, i.e., upstream of the scrubber. However, the commission expects that relocating the CEMS downstream of the scrubber would have less potential problems for the CEMS. Additionally, the current rule allows for the use of a PEMS in lieu of a CEMS. The commenter has not provided sufficient justification for why relocating the CEMS or installing a PEMS are not feasible alternatives for the commenter's ceramic kilns. Neither has the commenter provided sufficient justification for**

**why the continuous NO<sub>x</sub> monitoring is not needed to assure compliance with the rule. Therefore, the commission has no basis to consider replacing the continuous NO<sub>x</sub> monitoring requirement using a CEMS or PEMS with an alternative method such as periodic testing. No change has been made to the rule in response to this comment.**

#### Comment

Dal-Tile also commented it had no control over the required test methods for determining fuel calorific value, as part of the stack testing requirements of §117.8000(c)(6), that may be used by the fuel supplier. Therefore, Dal-Tile requested the TCEQ revise the rule language to allow calorific values provided by natural gas suppliers to be fully compliant with the rules.

#### Response

**Regarding changes to required methods for determining fuel calorific value, the commission declines to make the change. The commission did not propose changes to §117.8000(c)(6), and the suggested change is outside the scope of this rulemaking. Furthermore, the existing rule provision applies to the NO<sub>x</sub> source owner or operator and not to the fuel supplier. The owner or operator has the flexibility to have a separate analysis performed to determine the fuel calorific value according to the specified methods in the rule. The existing provision also allows the source owner or operator to request an alternate**

**method as approved by the TCEQ executive director and the EPA. The commission makes no changes in response to this comment.**

#### Comment

The EPA commented that previous NO<sub>x</sub> control requirements for natural gas-fired compressor engines in the DFW nine-county area and in East Texas counties relied on NSCR, catalytic convertors. The EPA commented that these catalytic convertors typically require periodic changes of catalysts to maintain NO<sub>x</sub> control levels. The EPA questioned whether Texas performed any follow-up on the affected sources to confirm that proper maintenance occurred to ensure NO<sub>x</sub> controls still met the applicable NO<sub>x</sub> requirements.

#### Response

**To date, while the TCEQ has not initiated a targeted review of affected sources to confirm whether proper maintenance is occurring to ensure that NO<sub>x</sub> controls still meet the NO<sub>x</sub> control requirements, like the EPA, the TCEQ conducts investigation activities of affected sources, where the required maintenance would be one of the issues that is reviewed, and determines if an enforcement action is warranted. Source owners or operators of affected units subject to the DFW industrial rules are required to conduct testing every two years or within 15,000 hours of engine operation after the previous emission test and perform quarterly emission checks to ensure continued compliance with the NO<sub>x</sub> emission specifications. Affected source owners and**

**operators are also required to report in writing to the TCEQ executive director on a semiannual basis any excess emissions and the air-fuel ratio monitoring system performance. This includes the quarterly emission checks; the biennial emission testing required for demonstration of emissions compliance; and the specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the engine or emission control system, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted. Owners and operators are also required to maintain records on-site for a period of at least five years.**

**Source owners or operators of affected units subject to the East Texas combustion rules in Subchapter E, Division 4 are required to conduct testing every two years or within 15,000 hours of engine operation after the previous emission test and perform quarterly emission checks to ensure continued compliance with the NO<sub>x</sub> emission specifications. Owners and operators are also required to maintain records on-site for a period of at least five years. These records also include information relating to catalytic converter, air-fuel ratio controller, or other emissions-related control system maintenance, including the date and nature of corrective actions taken. The commission considers the current quarterly emissions checks, periodic testing, recordkeeping, and reporting requirements for engines subject to the Chapter**

**117 requirements to be sufficient to ensure proper operation and maintenance of catalyst controls. No changes are made in response to this comment.**

Comment

The EPA expressed support of the commission clearly identifying the sections that pertain to control of ammonia and CO emissions, which are not ozone precursors, and are therefore not necessary components of the Texas ozone SIP and are not intended for inclusion into the EPA-approved Texas SIP. The EPA also expressed support of the commission's inclusion of major sources of NO<sub>x</sub> located in Wise County to become subject to the requirements of Chapter 117.

**Response**

**The commission appreciates the EPA's support of the NO<sub>x</sub> RACT rulemaking. No changes are made in response to this comment.**

Comment

The EPA commented that it cannot approve the proposed compliance schedule, which states that upon publishing notice in the *Texas Register* that Wise County is no longer designated nonattainment for the 2008 eight-hour ozone NAAQS, the owner or operator of a unit in Wise County is not required to comply with the requirements of Subchapter B, Division 4. The EPA indicated it cannot approve this provision because it does not contain "a replicable procedure" and to accomplish changing the applicability for sources in Wise

County, the state would need to undergo rulemaking and submit a subsequent SIP revision.

### **Response**

**The commission disagrees that a replicable procedure is necessary to change the applicability of RACT rules to Wise County in the event the nonattainment designation for Wise County is no longer legally effective. If the nonattainment designation is no longer legally effective, then there is no underlying legal basis or support for the RACT requirement to apply to Wise County. The inclusion of Wise County in the DFW nonattainment area is currently in litigation, awaiting a decision from the D.C. Circuit. A final decision from the court that vacates the nonattainment designation for Wise County would mean that the EPA would no longer have the authority to require or enforce RACT requirements in an area that is not legally designated nonattainment.**

**Only in the absence of a legally valid nonattainment designation would the commission be able to act under this rule provision and such action would merely provide notice that Wise County would no longer be legally required to comply with provisions that are no longer legally valid. Further action from the EPA would not be required if a final court decision vacates the nonattainment designation of Wise County; therefore, no FCAA, §110(l) demonstration could be required to remove a requirement that would no**

**longer be legally required. Furthermore, the 2018 future-year attainment demonstration modeling documented in the 2015 DFW Attainment Demonstration SIP (2013-015-SIP-NR) proposal being adopted concurrently with this rulemaking does not include NO<sub>x</sub> reductions from any of the RACT rules proposed for Wise County. Since no emissions reductions from this rulemaking were included in the 2018 future case modeling for Wise County, cessation of the compliance obligations for NO<sub>x</sub> sources in Wise County would not affect the attainment demonstration modeling.**

**To ensure that the rule language clearly establishes this standard, the commission is replacing the proposed language "Wise County is no longer designated nonattainment for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard" in §117.9030(a)(3) and §117.9130(e) with "the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective."**

#### Comment

Luminant expressed support of the addition of §117.1335(d)(6), which specifies the requirements for utility sources to comply with the NO<sub>x</sub> emission specification in lb/MMBtu on a rolling 168-hour average. Although Luminant disagreed that the proposed clarification is the best interpretation of the rules, Luminant favored the proposed changes that would provide regulatory consistency and clarification regarding the specific

requirements of the appropriate calculation methodology.

## **Response**

**The commission appreciates Luminant's support of the NO<sub>x</sub> RACT rulemaking. No changes are made in response to this comment.**

## Comment

Solar and the TPA suggested that the commission maintain the 4,500 hp level as the threshold for units subject to the NO<sub>x</sub> standards and adopt emission levels in 40 CFR Part 60, Subpart KKKK, the current New Source Performance Standard (NSPS) for industrial combustion turbines, for modified and reconstructed industrial turbines. Solar and the TPA commented that the proposed emission values are stricter than 40 CFR Part 60, Subpart KKKK levels for modified and reconstructed units, and 40 CFR Part 60, Subpart KKKK contains emission standards for modified and reconstructed units were set at emission levels existing units were capable of meeting. For modified and reconstructed units with a heat input less than or equal to 50 MMBtu/hr, 40 CFR Part 60, Subpart KKKK contains an emission standard of 150 ppm. The proposed RACT requirements set a NO<sub>x</sub> limit of 122 ppm for similarly sized industrial turbines, i.e., turbines rated less than 4,500 hp. For two affected units in Wise County, Solar commented that a dry low-NO<sub>x</sub> retrofit is available but at significant capital cost. The other two affected units in Wise County will require uprating to a higher power rating and retrofitting with dry low-NO<sub>x</sub> technology; this will impose significant capital costs. For these two units, Solar commented the results of the uprate and

retrofit will potentially require corresponding compressor or other equipment upgrading, replacement, or modification; may trigger additional new source review permitting and/or Federal Energy Regulatory Commission permitting issues; and may result in the site running at a lower, less efficient load.

The TPA and Solar also disagreed with the commission's analysis that no capital costs due to retrofits or combustion modifications were expected for industrial gas-fired turbines in Wise County to meet the proposed NO<sub>x</sub> emission specifications. Solar and the TPA estimated the compliance cost to be as high as \$2 million to \$4 million for each of the four affected Solar industrial turbines to comply with the RACT rulemaking. One TPA member determined that two industrial gas-fired turbines from its fleet would require retrofit technology estimated to cost between \$1.5 million to \$4 million per turbine. The TPA member estimated the cost per ton for emissions reductions to be \$38,800. The TPA contended this would approach a complete source replacement, contrary to RACT requirements. Solar contended that a source-specific RACT cost estimate is imperative to assess the cost-effectiveness of the proposed RACT rulemaking on each affected unit in Wise County. Similarly, the TPA commented that consideration on a case-by-case basis of the specific technological and economic circumstances of an individual unit is the best way to ensure emission limits are complied with while accounting for exceptional circumstances that may arise in particular cases. The TPA endorsed and fully incorporated Solar's comments.

## **Response**

**While the commission may consider Federal rules such as 40 CFR Part 60, Subpart KKKK when determining NO<sub>x</sub> RACT control levels, RACT is not defined by rules such as the NSPS. The referenced NSPS rules are national rules, whereas the NO<sub>x</sub> RACT rules that the commission is adopting for the DFW 2008 eight-hour ozone nonattainment area are specific to the facilities in that area. Furthermore, RACT requirements can be, and are in some circumstances, more stringent than NSPS or National Emission Standards for Hazardous Air Pollutants rules. The commission declines to make the suggested change to create an exemption threshold based on unit size. However, based on supplemental data and information provided by, and comments received from, owners or operators of these units in Wise County, the commission has determined that some of the affected turbines in Wise County in the proposed mid-size category, 4,500 hp and greater but less than 10,000 hp, may not be able to meet the proposed 0.20 lb/MMBtu NO<sub>x</sub> emission specification without making significant modifications or retrofits at substantial costs. The commission determined at proposal that these costs did not represent RACT for these turbines in Wise County. The commission's proposed emission standards were based on existing emissions data for the units, but the commission's assessment of the ongoing emissions performance based on this data for the midsize category of turbines may have been too conservative. This resulted in the emissions standard being lower**

**than what would be consistent with the commission's determination of RACT for industrial turbines in Wise County. Furthermore, additional information was provided by the TPA, and stack test data was provided by an affected source owner or operator for specific units identified in Wise County, which supplemented and clarified the 2012 EI data, upon which the commission proposed the NO<sub>x</sub> RACT standards for industrial turbines in Wise County. The additional information and data indicated unit performance variability among the various turbine model ratings and showed test results as high as 0.50 lb/MMBtu.**

**Therefore, the commission is removing the unit size category for units with a hp rating of less than 4,500 hp and the unit size category for units with a hp rating of 4,500 hp or greater but less than 10,000 hp. The commission is replacing these two unit size categories with a unit size category for units with a hp rating of less than 10,000 hp. Furthermore, the commission adopts a NO<sub>x</sub> emission limit of 0.55 lb/MMBtu for turbines rated less than 10,000 hp. Based on the supplemental information provided by source owners or operators of affected units and considering the variation in test data for some units, the commission determines that 0.55 lb/MMBtu for units rated less than 10,000 hp is an appropriate RACT control level considering current performance levels of existing units in Wise County. While this control level is numerically the same as the current NSPS rule for modified and**

**reconstructed industrial gas turbines with a heat input less than or equal to 50 MMBtu/hr, the commission makes clear that 0.55 lb/MMBtu is the appropriate RACT level of control specifically for the units rated less than 10,000 hp identified in Wise County considering the specific factors associated with those units. This control level is also consistent with the commission's determination of RACT for industrial turbines in Wise County made at proposal. Furthermore, based on unit specific information, the commission expects that no NO<sub>x</sub> control technology retrofits will be necessary to comply with the RACT rule requirements for any of the affected industrial combustion turbines in Wise County. Therefore, the commission expects no fiscal impacts associated with controls for units in Wise County to comply with the adopted RACT emission standards. Based on the revised NO<sub>x</sub> emission specifications, no affected sources are anticipated to undergo retrofits of any kind in order to meet the emission limits for industrial gas-fired turbines in Wise County. Due to public comment, the commission revises the unit power rating threshold of 4,500 hp in proposed §117.405(b)(3)(A) to 10,000 hp. The commission also removes proposed §117.405 (b)(3)(B) and re-letters proposed subsection (b)(3)(C) to subsection (b)(3)(B).**

Comment

Solar and the TPA opposed the January 1, 2017, compliance deadline and suggested a

phased-in compliance schedule to allow industry the time to develop and implement technology upgrades necessary to comply with proposed RACT standards.

### **Response**

**An alternative compliance schedule, such as a phased-in compliance schedule suggested by the commenter, is unnecessary at this time, especially given that the affected Wise County turbines are not expected to require retrofits.**

**Furthermore, the EPA's implementation rule for the 2008 eight-hour ozone NAAQS specifies the January 1, 2017, date as the compliance deadline for implementation of RACT requirements. The commission retains in the rule the compliance deadline of January 1, 2017, for affected units. No changes are made in response to this comment.**

### Comment

The TPA disagreed with the commission's analysis that 0.50 g/hp-hr represents RACT for gas-fired rich-burn engines. One TPA member determined that six gas-fired rich-burn engines from its fleet, already controlled by catalyst, could not meet the proposed NO<sub>x</sub> level even with additional catalyst. For a particular 1,680 hp engine, an emission control system conversion kit would cost \$90,000 for the engine to meet 0.50 g/hp-hr. The member estimated \$540,000 in total costs for the six engines. The member further estimated the cost per ton of NO<sub>x</sub> reduced for this one engine to be \$11,100. The TPA, therefore, requested the commission establish 1.0 g/hp-hr as NO<sub>x</sub> RACT for Waukesha engines.

## **Response**

**The commission disagrees that an emission limit of 0.50 g/hp-hr is not representative of RACT for gas-fired rich-burn engines. The commission estimated the total costs for NSCR catalyst retrofits for gas-fired rich-burn engines in Wise County based on some rich-burn engines needing entire catalyst system retrofits and some engines already equipped with catalyst systems only needing additional catalyst elements. The \$30/hp estimate used by the commission for capital costs for new NSCR systems ((39 TexReg 10351) December 26, 2014, issue of the *Texas Register*) is an overall estimate, and capital costs for an individual engine may be higher than this estimate. The \$90,000 capital cost estimate provided by the TPA would equate to approximately \$54/hp. While higher than the commission's estimate, the commission still considers the TPA's cost estimate for NSCR on rich-burn engines to be economically feasible. The TPA's estimated cost-effectiveness of \$11,100 per ton appears to be based on only first-year capital costs and is not annualized. Capital costs associated with control requirements are typically annualized over a period of years when calculating cost-effectiveness on a dollar-per-ton basis. Calculating cost-effectiveness based on the first-year capital costs and a single year of emission reductions inflates the dollar-per-ton estimate. The cost-effectiveness estimate used by the commission in the RACT and fiscal analyses for this rulemaking included**

**annual operating and maintenance costs and annualized capital costs over the first five years the rules are in effect. The first-year cost-effectiveness estimate by the TPA cannot be compared to the commission's cost-effectiveness estimates without being converted to the same basis.**

**Furthermore, the TPA's cost-per-ton estimate of \$11,100 is also based on a NO<sub>x</sub> reduction from 1.0 g/hp-hr to 0.50 g/hp-hr, when it should be from 2.0 g/hp-hr to 0.50 g/hp-hr. Site-specific data of annual NO<sub>x</sub> emissions and operating hours reported to the 2012 EI indicate the 1,680 hp engine operated at a performance level of 2.0 g/hp-hr. Based on the TPA's cost information of the conversion kit annualized over five years, the commission estimates the cost per ton for the 1,680 hp engine to be \$1,027. This figure includes the \$90,000 capital cost for the conversion kit, a capital cost of \$2,500 for one totalizing fuel flow meter, annual maintenance costs of \$3,000 for catalyst washing and O<sub>2</sub> or NO<sub>x</sub> sensor replacement, annual average costs of \$2,525 for compliance testing, and an emission reduction of approximately 23.4 tpy. Annualizing this over five years, the commission notes that this estimate of \$1,027 per ton for NSCR systems using the TPA capital costs is lower than the overall average of \$1,563 per ton the commission cited for all affected units, including rich-burn engines, in the proposed rulemaking ((39 TexReg 10350) December 26, 2014, issue of the *Texas Register*). The commission maintains that the NO<sub>x</sub> emission specification of 0.50 g/hp-hr represents RACT for**

**gas-fired rich-burn engines. No changes are made in response to this comment.**

Comment

The TPA supported the source cap option and use of emission reduction credits as a compliance flexibility mechanism for sources in Wise County affected by the proposed RACT rules. The TPA also supported rule provisions allowing affected source owners and operators to petition the TCEQ executive director for alternative CO and ammonia emission specifications. Regarding gas-fired lean-burn engines in Wise County, the TPA expressed support of the proposed NO<sub>x</sub> levels set at a higher level than existing levels for sources in the DFW nine-county ozone nonattainment area. The TPA stated support of the commission's decision to not revise existing RACT rules applicable to oil and gas sources of NO<sub>x</sub> in the DFW nine-county ozone nonattainment area.

**Response**

**The commission appreciates the TPA's support of the NO<sub>x</sub> RACT rulemaking. No changes are made in response to these comments.**

Comment

One individual commented the public is doomed to suffer if its air is left to the TCEQ since those making money from dirty air seem to have bought everyone with power to do something to clean up the air, and no TCEQ board member was present at the public

hearing.

**Response**

**The purpose of this Chapter 117 rulemaking is to meet FCAA NO<sub>x</sub> RACT requirements for the DFW area. This comment is outside the scope of this rulemaking. Additional discussion in response to this comment is provided in the 2015 DFW Attainment Demonstration SIP Revision (Non-Rule Project No. 2013-015-SIP-NR) being adopted concurrent with this rulemaking. No changes are made to this rulemaking in response to this comment.**

## **SUBCHAPTER A: DEFINITIONS**

### **§117.10**

#### **Statutory Authority**

The amended section is adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended section is also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The amended section is also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions. The amended section is also adopted under Federal Clean Air Act (FCAA), 42 United States

Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended section implements THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.10. Definitions.**

Unless specifically defined in the Texas Clean Air Act or Chapter 101 of this title (relating to General Air Quality Rules), the terms in this chapter have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply, unless the context clearly indicates otherwise. Additional definitions for terms used in this chapter are found in §3.2 and §101.1 of this title (relating to Definitions).

(1) Annual capacity factor--The total annual fuel consumed by a unit divided by the fuel that could be consumed by the unit if operated at its maximum rated capacity for 8,760 hours per year.

(2) Applicable ozone nonattainment area--The following areas, as designated under the 1990 Federal Clean Air Act Amendments.

(A) Beaumont-Port Arthur ozone nonattainment area--An area consisting of Hardin, Jefferson, and Orange Counties.

(B) Dallas-Fort Worth eight-hour ozone nonattainment area--An area consisting of:

(i) for the purposes of Subchapter D of this chapter (relating to Combustion Control at Minor Sources in Ozone Nonattainment Areas), Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties; or

(ii) for all other divisions of this chapter, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties.

(C) Houston-Galveston-Brazoria ozone nonattainment area--An area consisting of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

(3) Auxiliary steam boiler--Any combustion equipment within an electric power generating system, as defined in this section, that is used to produce steam for purposes other than generating electricity. An auxiliary steam boiler produces steam as a replacement for steam produced by another piece of equipment that is not operating due to planned or unplanned maintenance.

(4) Average activity level for fuel oil firing--The product of an electric utility unit's maximum rated capacity for fuel oil firing and the average annual capacity factor for fuel oil firing for the period from January 1, 1990, to December 31, 1993.

(5) Block one-hour average--An hourly average of data, collected starting at the beginning of each clock hour of the day and continuing until the start of the next clock hour.

(6) Boiler--Any combustion equipment fired with solid, liquid, and/or gaseous fuel used to produce steam or to heat water.

(7) Btu--British thermal unit.

(8) Chemical processing gas turbine--A gas turbine that vents its exhaust gases into the operating stream of a chemical process.

(9) Continuous emissions monitoring system (CEMS)--The total equipment necessary for the continuous determination and recordkeeping of process gas concentrations and emission rates in units of the applicable emission limitation.

(10) Daily--A calendar day starting at midnight and continuing until midnight the following day.

(11) Diesel engine--A compression-ignited two- or four-stroke engine that liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

(12) Duct burner--A unit that combusts fuel and that is placed in the exhaust duct from another unit (such as a stationary gas turbine, stationary internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases.

(13) Electric generating facility (EGF)--A unit that generates electric energy for compensation and is owned or operated by a person doing business in this state, including a municipal corporation, electric cooperative, or river authority.

(14) Electric power generating system--One electric power generating system consists of either:

(A) for the purposes of Subchapter C, Divisions 1 and 4 of this chapter (relating to Beaumont-Port Arthur Ozone Nonattainment Area Utility Electric Generation Sources; and Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources), all boilers, auxiliary steam boilers, and stationary gas turbines

(including duct burners used in turbine exhaust ducts) at electric generating facility (EGF) accounts that generate electric energy for compensation; are owned or operated by an electric cooperative, municipality, river authority, public utility, independent power producer, or a Public Utility Commission of Texas regulated utility, or any of its successors; and are entirely located in one of the following ozone nonattainment areas:

(i) Beaumont-Port Arthur; or

(ii) Dallas-Fort Worth eight-hour;

(B) for the purposes of Subchapter C, Division 3 of this chapter (relating to Houston-Galveston-Brazoria Ozone Nonattainment Area Utility Electric Generation Sources), all boilers, auxiliary steam boilers, and stationary gas turbines (including duct burners used in turbine exhaust ducts) at EGF accounts that generate electric energy for compensation; are owned or operated by an electric cooperative, municipality, river authority, public utility, or a Public Utility Commission of Texas regulated utility, or any of its successors; and are entirely located in the Houston-Galveston-Brazoria ozone nonattainment area;

(C) for the purposes of Subchapter B, Division 3 of this chapter (relating to Houston-Galveston-Brazoria Ozone Nonattainment Area Major Sources), all units in the Houston-Galveston-Brazoria ozone nonattainment area that generate

electricity but do not meet the conditions specified in subparagraph (B) of this paragraph, including, but not limited to, cogeneration units and units owned by independent power producers; or

(D) for the purposes of Subchapter E, Division 1 of this chapter (relating to Utility Electric Generation in East and Central Texas), all boilers, auxiliary steam boilers, and stationary gas turbines at EGF accounts that generate electric energy for compensation; are owned or operated by an electric cooperative, independent power producer, municipality, river authority, or public utility, or any of its successors; and are located in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Parker, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.

(15) Emergency situation--As follows.

(A) An emergency situation is any of the following:

(i) an unforeseen electrical power failure from the serving electric power generating system;

(ii) the period of time that an Electric Reliability Council of Texas, Inc. (ERCOT)-issued emergency notice or energy emergency alert (EEA) (as defined in *ERCOT Nodal Protocols, Section 2: Definitions and Acronyms* (August 13, 2014) and issued as specified in *ERCOT Nodal Protocols, Section 6: Adjustment Period and Real-Time Operations* (August 13, 2014)) is applicable to the serving electric power generating system. The emergency situation is considered to end upon expiration of the emergency notice or EEA issued by ERCOT;

(iii) an unforeseen failure of on-site electrical transmission equipment (e.g., a transformer);

(iv) an unforeseen failure of natural gas service;

(v) an unforeseen flood or fire, or a life-threatening situation;

(vi) operation of emergency generators for Federal Aviation Administration licensed airports, military airports, or manned space flight control centers for the purposes of providing power in anticipation of a power failure due to severe storm activity; or

(vii) operation of an emergency generator as part of ERCOT's emergency response service (as defined in *ERCOT Nodal Protocols, Section 2: Definitions*

*and Acronyms* (August 13, 2014)) if the operation is in direct response to an instruction by ERCOT during the period of an ERCOT EEA as specified in clause (ii) of this subparagraph.

(B) An emergency situation does not include:

(i) operation for training purposes or other foreseeable events;

or

(ii) operation for purposes of supplying power for distribution to the electric grid, except as specified in subparagraph (A)(vii) of this paragraph.

(16) Functionally identical replacement--A unit that performs the same function as the existing unit that it replaces, with the condition that the unit replaced must be physically removed or rendered permanently inoperable before the unit replacing it is placed into service.

(17) Heat input--The chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the sensible heat of the incoming combustion air. In the case of carbon monoxide (CO) boilers, the heat input includes the enthalpy of all regenerator off-gases and the heat of combustion of the incoming CO and of the auxiliary fuel. The enthalpy change of the fluid catalytic cracking

unit regenerator off-gases refers to the total heat content of the gas at the temperature it enters the CO boiler, referring to the heat content at 60 degrees Fahrenheit, as being zero.

(18) Heat treat furnace--A furnace that is used in the manufacturing, casting, or forging of metal to heat the metal so as to produce specific physical properties in that metal.

(19) High heat release rate--A ratio of boiler design heat input to firebox volume (as bounded by the front firebox wall where the burner is located, the firebox side waterwall, and extending to the level just below or in front of the first row of convection pass tubes) greater than or equal to 70,000 British thermal units per hour per cubic foot.

(20) Horsepower rating--The engine manufacturer's maximum continuous load rating at the lesser of the engine or driven equipment's maximum published continuous speed.

(21) Incinerator--As follows.

(A) For the purposes of this chapter, the term "incinerator" includes both of the following:

(i) a control device that combusts or oxidizes gases or vapors (e.g., thermal oxidizer, catalytic oxidizer, vapor combustor); and

(ii) an incinerator as defined in §101.1 of this title (relating to Definitions).

(B) The term "incinerator" does not apply to boilers or process heaters as defined in this section, or to flares as defined in §101.1 of this title.

(22) Industrial boiler--Any combustion equipment, not including utility or auxiliary steam boilers as defined in this section, fired with liquid, solid, or gaseous fuel, that is used to produce steam or to heat water.

(23) International Standards Organization (ISO) conditions--ISO standard conditions of 59 degrees Fahrenheit, 1.0 atmosphere, and 60% relative humidity.

(24) Large utility system--All boilers, auxiliary steam boilers, and stationary gas turbines that are located in the Dallas-Fort Worth eight-hour ozone nonattainment area, and were part of one electric power generating system on January 1, 2000, that had a combined electric generating capacity equal to or greater than 500 megawatts.

(25) Lean-burn engine--A spark-ignited or compression-ignited, Otto cycle, diesel cycle, or two-stroke engine that is not capable of being operated with an exhaust stream oxygen concentration equal to or less than 0.5% by volume, as originally designed by the manufacturer.

(26) Low annual capacity factor boiler, process heater, or gas turbine supplemental waste heat recovery unit--An industrial, commercial, or institutional boiler; process heater; or gas turbine supplemental waste heat recovery unit with maximum rated capacity:

(A) greater than or equal to 40 million British thermal units per hour (MMBtu/hr), but less than 100 MMBtu/hr and an annual heat input less than or equal to  $2.8 (10^{11})$  British thermal units per year (Btu/yr), based on a rolling 12-month average; or

(B) greater than or equal to 100 MMBtu/hr and an annual heat input less than or equal to  $2.2 (10^{11})$  Btu/yr, based on a rolling 12-month average.

(27) Low annual capacity factor stationary gas turbine or stationary internal combustion engine--A stationary gas turbine or stationary internal combustion engine that is demonstrated to operate less than 850 hours per year, based on a rolling 12-month average.

(28) Low heat release rate--A ratio of boiler design heat input to firebox volume less than 70,000 British thermal units per hour per cubic foot.

(29) Major source--Any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit:

(A) at least 50 tons per year (tpy) of nitrogen oxides (NO<sub>x</sub>) and is located in the Beaumont-Port Arthur ozone nonattainment area;

(B) at least 50 tpy of NO<sub>x</sub> and is located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County;

(C) at least 100 tpy of NO<sub>x</sub> and is located in Wise County;

(D) at least 25 tpy of NO<sub>x</sub> and is located in the Houston-Galveston-Brazoria ozone nonattainment area; or

(E) the amount specified in the major source definition contained in the Prevention of Significant Deterioration of Air Quality regulations promulgated by the United States Environmental Protection Agency in 40 Code of Federal Regulations §52.21 as amended June 3, 1993 (effective June 3, 1994), and is located in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Comal, Fannin, Fayette, Freestone, Goliad, Gregg,

Grimes, Harrison, Hays, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.

(30) Maximum rated capacity--The maximum design heat input, expressed in million British thermal units per hour, unless:

(A) the unit is a boiler, utility boiler, or process heater operated above the maximum design heat input (as averaged over any one-hour period), in which case the maximum operated hourly rate must be used as the maximum rated capacity; or

(B) the unit is limited by operating restriction or permit condition to a lesser heat input, in which case the limiting condition must be used as the maximum rated capacity; or

(C) the unit is a stationary gas turbine, in which case the manufacturer's rated heat consumption at the International Standards Organization (ISO) conditions must be used as the maximum rated capacity, unless limited by permit condition to a lesser heat input, in which case the limiting condition must be used as the maximum rated capacity; or

(D) the unit is a stationary, internal combustion engine, in which case the manufacturer's rated heat consumption at Diesel Equipment Manufacturer's Association or ISO conditions must be used as the maximum rated capacity, unless limited by permit condition to a lesser heat input, in which case the limiting condition must be used as the maximum rated capacity.

(31) Megawatt (MW) rating--The continuous MW output rating or mechanical equivalent by a gas turbine manufacturer at International Standards Organization conditions, without consideration to the increase in gas turbine shaft output and/or the decrease in gas turbine fuel consumption by the addition of energy recovered from exhaust heat.

(32) Nitric acid--Nitric acid that is 30% to 100% in strength.

(33) Nitric acid production unit--Any source producing nitric acid by either the pressure or atmospheric pressure process.

(34) Nitrogen oxides (NO<sub>x</sub>)--The sum of the nitric oxide and nitrogen dioxide in the flue gas or emission point, collectively expressed as nitrogen dioxide.

(35) Parts per million by volume (ppmv)--All ppmv emission specifications specified in this chapter are referenced on a dry basis. When required to adjust pollutant

concentrations to a specified oxygen ( $O_2$ ) correction basis, the following equation must be used.

Figure: 30 TAC §117.10(35) (No change to the figure as it exists in TAC)

(36) Peaking gas turbine or engine--A stationary gas turbine or engine used intermittently to produce energy on a demand basis.

(37) Plant-wide emission rate--The ratio of the total actual nitrogen oxides mass emissions rate discharged into the atmosphere from affected units at a major source when firing at their maximum rated capacity to the total maximum rated capacities for those units.

(38) Plant-wide emission specification--The ratio of the total allowable nitrogen oxides mass emissions rate dischargeable into the atmosphere from affected units at a major source when firing at their maximum rated capacity to the total maximum rated capacities for those units.

(39) Predictive emissions monitoring system (PEMS)--The total equipment necessary for the continuous determination and recordkeeping of process gas concentrations and emission rates using process or control device operating parameter

measurements and a conversion equation or computer program to produce results in units of the applicable emission limitation.

(40) Process heater--Any combustion equipment fired with liquid and/or gaseous fuel that is used to transfer heat from combustion gases to a process fluid, superheated steam, or water for the purpose of heating the process fluid or causing a chemical reaction. The term "process heater" does not apply to any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment, or to boilers as defined in this section.

(41) Pyrolysis reactor--A unit that produces hydrocarbon products from the endothermic cracking of feedstocks such as ethane, propane, butane, and naphtha using combustion to provide indirect heating for the cracking process.

(42) Reheat furnace--A furnace that is used in the manufacturing, casting, or forging of metal to raise the temperature of that metal in the course of processing to a temperature suitable for hot working or shaping.

(43) Rich-burn engine--A spark-ignited, Otto cycle, four-stroke, naturally aspirated or turbocharged engine that is capable of being operated with an exhaust stream oxygen concentration equal to or less than 0.5% by volume, as originally designed by the manufacturer.

(44) Small utility system--All boilers, auxiliary steam boilers, and stationary gas turbines that are located in the Dallas-Fort Worth eight-hour ozone nonattainment area, and were part of one electric power generating system on January 1, 2000, that had a combined electric generating capacity less than 500 megawatts.

(45) Stationary gas turbine--Any gas turbine system that is gas and/or liquid fuel fired with or without power augmentation. This unit is either attached to a foundation or is portable equipment operated at a specific minor or major source for more than 90 days in any 12-month period. Two or more gas turbines powering one shaft must be treated as one unit.

(46) Stationary internal combustion engine--A reciprocating engine that remains or will remain at a location (a single site at a building, structure, facility, or installation) for more than 12 consecutive months. Included in this definition is any engine that, by itself or in or on a piece of equipment, is portable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine being replaced is included in calculating the consecutive residence time period. An engine is considered stationary if it is removed from one location for a period and then returned to the same location in an attempt to

circumvent the consecutive residence time requirement. Nonroad engines, as defined in 40 Code of Federal Regulations §89.2, are not considered stationary for the purposes of this chapter.

(47) System-wide emission rate--The ratio of the total actual nitrogen oxides mass emissions rate discharged into the atmosphere from affected units in an electric power generating system or portion thereof located within a single ozone nonattainment area when firing at their maximum rated capacity to the total maximum rated capacities for those units. For fuel oil firing, average activity levels must be used in lieu of maximum rated capacities for the purpose of calculating the system-wide emission rate.

(48) System-wide emission specification--The ratio of the total allowable nitrogen oxides mass emissions rate dischargeable into the atmosphere from affected units in an electric power generating system or portion thereof located within a single ozone nonattainment area when firing at their maximum rated capacity to the total maximum rated capacities for those units. For fuel oil firing, average activity levels must be used in lieu of maximum rated capacities for the purpose of calculating the system-wide emission specification.

(49) Thirty-day rolling average--An average, calculated for each day that fuel is combusted in a unit, of all the hourly emissions data for the preceding 30 days that fuel was combusted in the unit.

(50) Twenty-four hour rolling average--An average, calculated for each hour that fuel is combusted (or acid is produced, for a nitric or adipic acid production unit), of all the hourly emissions data for the preceding 24 hours that fuel was combusted in the unit.

(51) Unit--A unit consists of either:

(A) for the purposes of §§117.105, 117.305, 117.405, 117.1005, and 117.1205 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) and each requirement of this chapter associated with §§117.105, 117.305, 117.405, 117.1005, and 117.1205 of this title, any boiler, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section;

(B) for the purposes of §§117.110, 117.310, 117.1010, and 117.1210 of this title (relating to Emission Specifications for Attainment Demonstration) and each requirement of this chapter associated with §§117.110, 117.310, 117.1010, and 117.1210 of this title, any boiler, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section, or any other stationary source of nitrogen oxides (NO<sub>x</sub>) at a major source, as defined in this section;

(C) for the purposes of §117.2010 of this title (relating to Emission Specifications) and each requirement of this chapter associated with §117.2010 of this title,

any boiler, process heater, stationary gas turbine (including any duct burner in the turbine exhaust duct), or stationary internal combustion engine, as defined in this section;

(D) for the purposes of §117.2110 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) and each requirement of this chapter associated with §117.2110 of this title, any stationary internal combustion engine, as defined in this section;

(E) for the purposes of §117.3310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) and each requirement of this chapter associated with §117.3310 of this title, any stationary internal combustion engine, as defined in this section; or

(F) for the purposes of §117.410 and §117.1310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) and each requirement of this chapter associated with §117.410 and §117.1310 of this title, any boiler, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section, or any other stationary source of NO<sub>x</sub> at a major source, as defined in this section.

(52) Utility boiler--Any combustion equipment owned or operated by an electric cooperative, municipality, river authority, public utility, or Public Utility Commission of Texas regulated utility, fired with solid, liquid, and/or gaseous fuel, used to

produce steam for the purpose of generating electricity. Stationary gas turbines, including any associated duct burners and unfired waste heat boilers, are not considered to be utility boilers.

(53) Wood--Wood, wood residue, bark, or any derivative fuel or residue thereof in any form, including, but not limited to, sawdust, sander dust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

**SUBCHAPTER B: COMBUSTION CONTROL AT MAJOR INDUSTRIAL,  
COMMERCIAL, AND INSTITUTIONAL SOURCES IN OZONE**

**NONATTAINMENT AREAS**

**DIVISION 2: DALLAS-FORT WORTH OZONE NONATTAINMENT AREA**

**MAJOR SOURCES**

**§§117.200, 117.203, 117.205, 117.210, 117.215, 117.223, 117.225, 117.230, 117.235,  
117.240, 117.245, 117.252, 117.254, 117.256**

**Statutory Authority**

The repealed sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The repealed sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to

prepare and develop a general, comprehensive plan for the proper control of the state's air.

The repealed sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions.

The repealed sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The repealed sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.200. Applicability.**

**§117.203. Exemptions.**

**§117.205. Emission Specifications for Reasonably Available Control Technology (RACT).**

**§117.210. Emission Specifications for Attainment Demonstration.**

**§117.215. Alternative Plant-Wide Emission Specifications.**

**§117.223. Source Cap.**

**§117.225. Alternative Case Specific Specifications.**

**§117.230. Operating Requirements.**

**§117.235. Initial Demonstration of Compliance.**

**§117.240. Continuous Demonstration of Compliance.**

**§117.245. Notification, Recordkeeping, and Reporting Requirements.**

**§117.252. Final Control Plan Procedures for Reasonably Available Control  
Technology.**

**§117.254. Final Control Plan Procedures for Attainment Demonstration  
Emission Specifications.**

**§117.256. Revision of Final Control Plan.**

**SUBCHAPTER B: COMBUSTION CONTROL AT MAJOR INDUSTRIAL,  
COMMERCIAL, AND INSTITUTIONAL SOURCES IN OZONE  
NONATTAINMENT AREAS**

**DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE  
NONATTAINMENT AREA MAJOR SOURCES**

**§§117.400, 117.403, 117.405, 117.410, 117.423, 117.425, 117.430, 117.435,  
117.440, 117.445, 117.450, 117.452, 117.454, 117.456**

**Statutory Authority**

The new and amended sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The new and amended sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control

Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The new and amended sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions. The new and amended sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The new and amended sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.400. Applicability.**

(a) The provisions of this division apply to the following units located at any major stationary source of nitrogen oxides (NO<sub>x</sub>) located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County:

(1) industrial, commercial, or institutional boilers and process heaters;

(2) stationary gas turbines;

- (3) stationary internal combustion engines;
- (4) duct burners used in turbine exhaust ducts;
- (5) lime kilns;
- (6) metallurgical heat treating furnaces and reheat furnaces;
- (7) incinerators;
- (8) glass, fiberglass, and mineral wool melting furnaces;
- (9) fiberglass and mineral wool curing ovens;
- (10) natural gas-fired ovens and heaters;
- (11) natural gas-fired dryers used in organic solvent, printing ink, clay, brick, ceramic tile, calcining, and vitrifying processes;
- (12) brick and ceramic kilns; and

(13) lead smelting reverberatory and blast (cupola) furnaces.

(b) The provisions of this division apply to the following units located at any major stationary source of NO<sub>x</sub> located in Wise County:

(1) industrial, commercial, or institutional process heaters;

(2) stationary gas turbines; and

(3) stationary internal combustion engines.

**§117.403. Exemptions.**

(a) Units located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County exempted from the provisions of this division, except as specified in §§117.440(i), 117.445(f)(4) and (9), 117.450, and 117.454 of this title (relating to Continuous Demonstration of Compliance; Notification, Recordkeeping, and Reporting Requirements; Initial Control Plan Procedures; and Final Control Plan Procedures for Attainment Demonstration Emission Specifications), include the following:

(1) industrial, commercial, or institutional boilers or process heaters with a maximum rated capacity equal to or less than:

(A) 2.0 million British thermal units per hour (MMBtu/hr) for boilers;

and

(B) 5.0 MMBtu/hr for process heaters;

(2) heat treating furnaces and reheat furnaces with a maximum rated capacity less than 20 MMBtu/hr;

(3) flares, incinerators with a maximum rated capacity less than 40 MMBtu/hr, pulping liquor recovery furnaces, sulfur recovery units, sulfuric acid regeneration units, molten sulfur oxidation furnaces, and sulfur plant reaction boilers;

(4) dryers, heaters, or ovens with a maximum rated capacity of 5.0 MMBtu/hr or less;

(5) any dryers, heaters, or ovens fired on fuels other than natural gas. This exemption does not apply to gas-fired curing ovens used for the production of mineral wool-type or textile-type fiberglass;

(6) any glass, fiberglass, and mineral wool melting furnaces with a maximum rated capacity of 2.0 MMBtu/hr or less;

(7) stationary gas turbines and stationary internal combustion engines, that are used as follows:

(A) in research and testing of the unit;

(B) for purposes of performance verification and testing of the unit;

(C) solely to power other engines or gas turbines during startups;

(D) exclusively in emergency situations, except that operation for testing or maintenance purposes of the gas turbine or engine is allowed for up to 100 hours per year, based on a rolling 12-month basis. Any new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after June 1, 2007, is ineligible for this exemption. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title (relating to General Definitions) and 40 Code of Federal Regulations (CFR) §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title (relating to Definitions), a used engine from anywhere outside that account;

(E) in response to and during the existence of any officially declared disaster or state of emergency;

(F) directly and exclusively by the owner or operator for agricultural operations necessary for the growing of crops or raising of fowl or animals; or

(G) as chemical processing gas turbines;

(8) any stationary diesel engine placed into service before June 1, 2007, that:

(A) operates less than 100 hours per year, based on a rolling 12-month basis; and

(B) has not been modified, reconstructed, or relocated on or after June 1, 2007. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title, a used engine from anywhere outside that account;

(9) any new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after June 1, 2007, that:

(A) operates less than 100 hours per year, based on a rolling 12-month basis, in other than emergency situations; and

(B) meets the corresponding emission standard for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998), and in effect at the time of installation, modification, reconstruction, or relocation. For the purposes of this paragraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title, a used engine from anywhere outside that account;

(10) boilers and industrial furnaces that were regulated as existing facilities by 40 CFR Part 266, Subpart H, as was in effect on June 9, 1993;

(11) brick or ceramic kilns with a maximum rated capacity less than 5.0 MMBtu/hr;

(12) low-temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing in which nitrogen-containing resins, or other additives are used;

(13) stationary, gas-fired, reciprocating internal combustion engines with a horsepower (hp) rating less than 50 hp;

(14) electric arc melting furnaces used in steel production;

(15) forming ovens and forming processes used in mineral wool-type fiberglass manufacturing; and

(16) natural gas-fired heaters used exclusively for providing comfort heat to areas designed for human occupancy.

(b) Units located in Wise County exempted from the provisions of this division, except as specified in §§117.440(i), 117.445(f)(4), 117.450, and 117.452 of this title (relating to Final Control Plan Procedures for Reasonably Available Control Technology), include the following:

(1) industrial, commercial, or institutional process heaters with a maximum rated capacity less than 40 MMBtu/hr;

(2) stationary gas turbines and stationary internal combustion engines that are used as follows:

(A) in research and testing of the unit;

(B) for purposes of performance verification and testing of the unit;

(C) solely to power other engines or gas turbines during startups;

(D) exclusively in emergency situations, except that operation for testing or maintenance purposes of the gas turbine or engine is allowed for up to 100 hours per year, based on a rolling 12-month basis; and

(E) in response to and during the existence of any officially declared disaster or state of emergency;

(3) stationary, diesel, reciprocating internal combustion engines;

(4) stationary, dual-fuel, reciprocating internal combustion engines; and

(5) stationary, gas-fired, reciprocating internal combustion engines with a hp rating less than 50 hp.

(c) The emission specifications in §117.410(a)(1) and (c) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) do not apply to

gas-fired boilers during periods that the owner or operator is required to fire fuel oil on an emergency basis due to natural gas curtailment or other emergency, provided:

(1) the fuel oil firing occurs during the months of November, December, January, or February; and

(2) the fuel oil firing does not exceed a total of 72 hours in any calendar month specified in paragraph (1) of this subsection.

**§117.405. Emission Specifications for Reasonably Available Control Technology (RACT).**

(a) Reasonably Available Control Technology (RACT) emission specifications for wood-fired boilers. For units located in the Dallas-Fort Worth eight-hour ozone nonattainment area, no person shall allow the discharge into the atmosphere nitrogen oxides (NO<sub>x</sub>) emissions in excess of 0.12 pounds per million British thermal units (lb/MMBtu) for wood-fired boilers, in accordance with the applicable schedule in §117.9030(a) of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources), except as provided in subsection (e) of this section.

(b) Emission specifications for RACT in Wise County. For units located in Wise County, no person shall allow the discharge into the atmosphere NO<sub>x</sub> emissions in excess of the following emission specifications, in accordance with the applicable schedule in §117.9030(a) of this title, except as provided in subsection (e) of this section:

(1) process heaters with a maximum rated capacity equal to or greater than 40 million British thermal units per hour (MMBtu/hr), 0.10 lb/MMBtu (or alternatively, 82 parts per million by volume (ppmv), at 3.0% oxygen (O<sub>2</sub>), dry basis);

(2) stationary, reciprocating internal combustion engines:

(A) gas-fired rich-burn engines, 0.50 grams per horsepower-hour (g/hp-hr); and

(B) gas-fired lean-burn engines:

(i) White Superior four-cycle units that have been placed into service, modified, reconstructed, or relocated:

(I) before June 1, 2015, 12.0 g/hp-hr; and

(II) on or after June 1, 2015, 2.0 g/hp-hr;

(ii) Clark two-cycle units that have been placed into service, modified, reconstructed, or relocated:

(I) before June 1, 2015, 12.0 g/hp-hr; and

(II) on or after June 1, 2015, 2.0 g/hp-hr;

(iii) Fairbanks Morse MEP two-cycle units that have been placed into service, modified, reconstructed, or relocated:

(I) before June 1, 2015, 4.0 g/hp-hr; and

(II) on or after June 1, 2015, 2.0 g/hp-hr; and

(iv) all others, 2.0 g/hp-hr; and

(3) stationary gas turbines:

(A) with a horsepower (hp) rating of less than 10,000 hp , 0.55 lb/MMBtu; and

(B) with a hp rating of 10,000 hp or greater, 0.15 lb/MMBtu.

(c) NO<sub>x</sub> averaging time. The emission specifications of subsections (a) and (b) of this section apply:

(1) if the unit is operated with a NO<sub>x</sub> continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS) under §117.440 of this title (relating to Continuous Demonstration of Compliance), either as:

(A) a rolling 30-day average, in the units of the applicable standard;

(B) a block one-hour average, in the units of the applicable standard, or alternatively;

(C) a block one-hour average, in pounds per hour, for boilers and process heaters, calculated as the product of the boiler's or process heater's maximum rated capacity and its applicable specification in lb/MMBtu; and

(2) if the unit is not operated with a NO<sub>x</sub> CEMS or PEMS under §117.440 of this title, a block one-hour average, in the units of the applicable standard. Alternatively for

boilers and process heaters, the emission specification may be applied in pounds per hour, as specified in paragraph (1)(C) of this subsection.

(d) Related emissions. No person shall allow the discharge into the atmosphere from any unit subject to NO<sub>x</sub> emission specifications in subsection (a) or (b) of this section, emissions in excess of the following, except as provided in §117.425 of this title (relating to Alternative Case Specific Specifications) or paragraph (3) of this subsection.

(1) Carbon monoxide (CO) emissions must not exceed 400 ppmv at 3.0% O<sub>2</sub>, dry basis (or alternatively, 3.0 g/hp-hr for stationary internal combustion engines; or 775 ppmv at 7.0% O<sub>2</sub>, dry basis for wood fuel-fired boilers or process heaters):

(A) on a rolling 24-hour averaging period, for units equipped with CEMS or PEMS for CO; and

(B) on a block one-hour averaging period, for units not equipped with CEMS or PEMS for CO.

(2) For units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 3.0% O<sub>2</sub>, dry, for boilers and process heaters; 15% O<sub>2</sub>, dry, for stationary gas turbines and gas-fired lean-burn engines; and 3.0% O<sub>2</sub>, dry, for all other units, based on:

(A) a block one-hour averaging period for units not equipped with a CEMS or PEMS for ammonia; and

(B) a rolling 24-hour averaging period for units equipped with CEMS or PEMS for ammonia.

(3) The correction of CO emissions to 3.0% O<sub>2</sub>, dry basis, in paragraph (1) of this subsection does not apply to boilers and process heaters operating at less than 10% of maximum load and with stack O<sub>2</sub> in excess of 15% (i.e., hot-standby mode).

(e) Compliance flexibility.

(1) An owner or operator may use any of the following alternative methods to comply with the NO<sub>x</sub> emission specifications of this section:

(A) §117.423 of this title (relating to Source Cap); or

(B) §117.9800 of this title (relating to Use of Emission Credits for Compliance).

(2) Section 117.425 of this title is not an applicable method of compliance with the NO<sub>x</sub> emission specifications of this section.

(3) An owner or operator may petition the executive director for an alternative to the CO or ammonia specifications of this section in accordance with §117.425 of this title.

(f) Prohibition of circumvention.

(1) The maximum rated capacity used to determine the applicability of the emission specifications in this section and the initial compliance demonstration, monitoring, testing requirements, and final control plan in §§117.435, 117.440, and 117.452 of this title (relating to Initial Demonstration of Compliance; Continuous Demonstration of Compliance; and Final Control Plan Procedures for Reasonably Available Control Technology) must be the greater of the following:

(A) the maximum rated capacity as of December 31, 2012;

(B) the maximum rated capacity after December 31, 2012; or

(C) the maximum rated capacity authorized by a permit issued under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) after December 31, 2012.

(2) A unit's classification is determined by the most specific classification applicable to the unit as of December 31, 2012. For example, a unit that is classified as a stationary gas-fired engine as of December 31, 2012, but subsequently is authorized to operate as a dual-fuel engine, is classified as a stationary gas-fired engine for the purposes of this chapter.

(3) A source that met the definition of major source on December 31, 2012, is always classified as a major source for purposes of this chapter. A source that did not meet the definition of major source (i.e., was a minor source, or did not yet exist) on December 31, 2012, but becomes a major source at any time after December 31, 2012, is from that time forward always classified as a major source for purposes of this chapter.

**§117.410. Emission Specifications for Eight-Hour Attainment Demonstration.**

(a) Emission specifications for eight-hour ozone attainment demonstration. For units located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County, no person shall allow the discharge into the atmosphere nitrogen oxides (NO<sub>x</sub>) emissions in excess of the following emission specifications, in accordance with the applicable schedule in §117.9030(b) of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources), except as provided in subsection (d) of this section:

(1) gas-fired boilers:

(A) with a maximum rated capacity equal to or greater than 100 million British thermal units per hour (MMBtu/hr), 0.020 pounds per million British thermal units (lb/MMBtu);

(B) with a maximum rated capacity equal to or greater than 40 MMBtu/hr, but less than 100 MMBtu/hr, 0.030 lb/MMBtu; and

(C) with a maximum rated capacity less than 40 MMBtu/hr, 0.036 lb/MMBtu (or alternatively, 30 parts per million by volume (ppmv) NO<sub>x</sub>, at 3.0% oxygen (O<sub>2</sub>), dry basis);

(2) liquid-fired boilers, 2.0 pounds per 1,000 gallons of liquid burned;

(3) process heaters:

(A) with a maximum rated capacity equal to or greater than 40 MMBtu/hr, 0.025 lb/MMBtu; and

(B) with a maximum rated capacity less than 40 MMBtu/hr, 0.036 lb/MMBtu (or alternatively, 30 ppmv, at 3.0% O<sub>2</sub>, dry basis);

(4) stationary, reciprocating internal combustion engines:

(A) gas-fired rich-burn engines:

(i) fired on landfill gas, 0.60 grams per horsepower-hour (g/hp-hr); and

(ii) all others, 0.50 g/hp-hr;

(B) gas-fired lean-burn engines:

(i) placed into service before June 1, 2007, that have not been modified, reconstructed, or relocated on or after June 1, 2007, 0.70 g/hp-hr; and

(ii) placed into service, modified, reconstructed, or relocated on or after June 1, 2007:

(I) fired on landfill gas, 0.60 g/hp-hr; and

(II) all others, 0.50 g/hp-hr;

(C) dual-fuel engines, 0.50 g/hp-hr;

(D) diesel engines, excluding dual-fuel engines, placed into service before March 1, 2009, that have not been modified, reconstructed, or relocated on or after March 1, 2009, the lower of 11.0 g/hp-hr or the emission rate established by testing, monitoring, manufacturer's guarantee, or manufacturer's other data;

(E) for diesel engines, excluding dual-fuel engines, not subject to subparagraph (D) of this paragraph:

(i) with a horsepower (hp) rating of less than 50 hp that are installed, modified, reconstructed, or relocated on or after March 1, 2009, 5.0 g/hp-hr;

(ii) with a hp rating of 50 hp or greater, but less than 100 hp, that are installed, modified, reconstructed, or relocated on or after March 1, 2009, 3.3 g/hp-hr;

(iii) with a hp rating of 100 hp or greater, but less than 750 hp, that are installed, modified, reconstructed, or relocated on or after March 1, 2009, 2.8 g/hp-hr; and

(iv) with a hp rating of 750 hp or greater that are installed, modified, reconstructed, or relocated on or after March 1, 2009, 4.5 g/hp-hr; and

(F) for the purposes of this paragraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title (relating to General Definitions) and 40 Code of Federal Regulations (CFR) §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title (relating to Definitions), a used engine from anywhere outside that account;

(5) stationary gas turbines:

(A) rated at 10 megawatts (MW) or greater, 0.032 lb/MMBtu;

(B) rated at 1.0 MW or greater, but less than 10 MW, 0.15 lb/MMBtu;

and

(C) rated at less than 1.0 MW, 0.26 lb/MMBtu;

(6) duct burners used in turbine exhaust ducts, the corresponding gas turbine emission specification of paragraph (5) of this subsection;

(7) kilns:

(A) lime kilns, 3.7 pounds per ton (lb/ton) of calcium oxide,

demonstrated either:

(i) on an individual kiln basis; or

(ii) on a site-wide production rate weighted average basis, using

the following equation:

Figure: 30 TAC §117.410(a)(7)(A)(ii)

$$E_{avg} = \frac{\sum_{i=1}^N (E_i \times PR_i)}{\sum_{i=1}^N PR_i}$$

Where:

$E_{avg}$  = daily production rate weighted average nitrogen oxides ( $NO_x$ ) emission rate, pounds per ton (lb/ton) of calcium oxide;

$E_i$  = daily average  $NO_x$  emission rate for kiln i, lb/ton of calcium oxide;

$i$  = each lime kiln at the site;

$N$  = the total number of kilns at the site; and

$PR_i$  = production rate of calcium oxide for kiln  $i$ , tons/day.

(B) brick and ceramic kilns, one of the following:

(i) a 40% reduction from the daily  $NO_x$  emissions reported to the Emissions Assessment Section for the calendar year 2000 Emissions Inventory. To ensure that this emission specification will result in a real 40% reduction in actual emissions, a consistent methodology must be used to calculate the 40% reduction;

(ii) 0.175 lb/ton of product for brick kilns; or

(iii) 0.27 lb/ton of product for ceramic kilns;

(8) metallurgical furnaces:

(A) heat treating furnaces, 0.087 lb/MMBtu. For heat treating furnaces equipped with  $NO_x$  continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) that comply with §117.440 of this title (relating to Continuous Demonstration of Compliance), this emission specification only applies from March 1 to October 31 of any calendar year;

(B) reheat furnaces, 0.10 lb/MMBtu. For reheat furnaces equipped with NO<sub>x</sub> CEMS or PEMS that comply with §117.440 of this title, this emission specification only applies from March 1 to October 31 of any calendar year; and

(C) lead smelting blast (cupola) and reverberatory furnaces used in conjunction, the combined rate of 0.45 lb/ton product;

(9) incinerators, either of the following:

(A) an 80% reduction from the daily NO<sub>x</sub> emissions reported to the Emissions Assessment Section for the calendar year 2000 Emissions Inventory. To ensure that this emission specification will result in a real 80% reduction in actual emissions, a consistent methodology must be used to calculate the 80% reduction; or

(B) 0.030 lb/MMBtu;

(10) glass and fiberglass melting furnaces:

(A) container glass melting furnaces:

(i) 4.0 lb/ton of glass pulled during furnace operation equal to or greater than 25% of the permitted glass production capacity; and

(ii) the applicable maximum allowable pound per hour NO<sub>x</sub> permit limit in a permit issued before June 1, 2007, during furnace operation less than 25% of the permitted glass production capacity;

(B) mineral wool-type cold-top electric fiberglass melting furnaces, 4.0 lb/ton of product pulled;

(C) mineral wool-type fiberglass regenerative furnaces, 1.45 lb/ton of product pulled; and

(D) mineral wool-type fiberglass non-regenerative gas-fired furnaces, 3.1 lb/ton product pulled;

(11) gas-fired curing ovens used for the production of mineral wool-type or textile-type fiberglass, 0.036 lb/MMBtu;

(12) natural gas-fired ovens and heaters, 0.036 lb/MMBtu;

(13) natural gas-fired dryers:

(A) dryers used in organic solvent, printing ink, clay, brick, ceramic tile, calcining, and vitrifying processes, 0.036 lb/MMBtu;

(B) spray dryers used in ceramic tile manufacturing processes, 0.15 lb/MMBtu; and

(14) as an alternative to the emission specifications in paragraphs (1) - (13) of this subsection for units with an annual capacity factor of 0.0383 or less, 0.060 lb/MMBtu. The capacity factor as of December 31, 2000, must be used to determine whether the unit is eligible for the emission specification of this paragraph. A 12-month rolling average must be used to determine the annual capacity factor for units placed into service after December 31, 2000.

(b) NO<sub>x</sub> averaging time. The emission specifications of subsection (a) of this section apply:

(1) if the unit is operated with a NO<sub>x</sub> CEMS or PEMS under §117.440 of this title, either as:

(A) a rolling 30-day average period, in the units of the applicable standard;

(B) a block one-hour average, in the units of the applicable standard, or alternatively;

(C) a block one-hour average, in pounds per hour, for boilers and process heaters, calculated as the product of the boiler's or process heater's maximum rated capacity and its applicable specification in lb/MMBtu; and

(2) if the unit is not operated with a NO<sub>x</sub> CEMS or PEMS under §117.440 of this title, a block one-hour average, in the units of the applicable standard. Alternatively for boilers and process heaters, the emission specification may be applied in pounds per hour, as specified in paragraph (1)(C) of this subsection.

(c) Related emissions. No person shall allow the discharge into the atmosphere from any unit subject to NO<sub>x</sub> emission specifications in subsection (a) of this section, emissions in excess of the following, except as provided in §117.425 of this title (relating to Alternative Case Specific Specifications) or paragraph (3) or (4) of this subsection.

(1) Carbon monoxide (CO) emissions must not exceed 400 ppmv at 3.0% O<sub>2</sub>, dry basis (or alternatively, 3.0 g/hp-hr for stationary internal combustion engines; or 775 ppmv at 7.0% O<sub>2</sub>, dry basis for wood fuel-fired boilers or process heaters):

(A) on a rolling 24-hour averaging period, for units equipped with CEMS or PEMS for CO; and

(B) on a block one-hour averaging period, for units not equipped with CEMS or PEMS for CO.

(2) For units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 3.0% O<sub>2</sub>, dry, for boilers and process heaters; 15% O<sub>2</sub>, dry, for stationary gas turbines (including duct burners used in turbine exhaust ducts) and gas-fired lean-burn engines; 7.0% O<sub>2</sub>, dry, for incinerators; and 3.0% O<sub>2</sub>, dry, for all other units, based on:

(A) a block one-hour averaging period for units not equipped with a CEMS or PEMS for ammonia; and

(B) a rolling 24-hour averaging period for units equipped with CEMS or PEMS for ammonia.

(3) The correction of CO emissions to 3.0% O<sub>2</sub>, dry basis, in paragraph (1) of this subsection does not apply to boilers and process heaters operating at less than 10% of maximum load and with stack O<sub>2</sub> in excess of 15% (i.e., hot-standby mode).

(4) The CO specifications in paragraph (1) of this subsection do not apply to incinerators subject to the CO limits of one of the following:

(A) §111.121 of this title (relating to Single-, Dual-, and Multiple-Chamber Incinerators);

(B) §113.2072 of this title (relating to Emission Limits) for hospital/medical/infectious waste incinerators; or

(C) 40 CFR Part 264 or 265, Subpart O, for hazardous waste incinerators.

(d) Compliance flexibility.

(1) An owner or operator may use any of the following alternative methods to comply with the NO<sub>x</sub> emission specifications of this section:

(A) §117.423 of this title (relating to Source Cap); or

(B) §117.9800 of this title (relating to Use of Emission Credits for Compliance).

(2) Section 117.425 of this title is not an applicable method of compliance with the NO<sub>x</sub> emission specifications of this section.

(3) An owner or operator may petition the executive director for an alternative to the CO or ammonia specifications of this section in accordance with §117.425 of this title.

(e) Prohibition of circumvention.

(1) The maximum rated capacity used to determine the applicability of the emission specifications in this section and the initial compliance demonstration, monitoring, testing requirements, and final control plan in §§117.435, 117.440, and 117.454 of this title (relating to Initial Demonstration of Compliance; Continuous Demonstration of Compliance; and Final Control Plan Procedures for Attainment Demonstration Emission Specifications) must be the greater of the following:

(A) the maximum rated capacity as of December 31, 2000;

(B) the maximum rated capacity after December 31, 2000; or

(C) the maximum rated capacity authorized by a permit issued under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) after December 31, 2000.

(2) A unit's classification is determined by the most specific classification applicable to the unit as of December 31, 2000. For example, a unit that is classified as a stationary gas-fired engine as of December 31, 2000, but subsequently is authorized to operate as a dual-fuel engine, is classified as a stationary gas-fired engine for the purposes of this chapter.

(3) Changes after December 31, 2000, to a unit subject to an emission specification in this section that result in increased NO<sub>x</sub> emissions from a unit not subject to an emission specification of this section, such as redirecting one or more fuel or waste streams containing chemical-bound nitrogen to an incinerator with a maximum rated capacity of less than 40 MMBtu/hr, or a flare, are only allowed if:

(A) the increase in NO<sub>x</sub> emissions at the unit not subject to this section is determined using a CEMS or PEMS that meets the requirements of §117.440 of this title, or through stack testing that meets the requirements of §117.435 of this title; and

(B) emission credits equal to the increase in NO<sub>x</sub> emissions at the unit not subject to this section are obtained and used in accordance with §117.9800 of this title.

(4) A source that met the definition of major source on December 31, 2000, is always classified as a major source for purposes of this chapter. A source that did not meet

the definition of major source (i.e., was a minor source, or did not yet exist) on December 31, 2000, but becomes a major source at any time after December 31, 2000, is from that time forward always classified as a major source for purposes of this chapter.

(5) The availability under subsection (a)(14) of this section of an emission specification for units with an annual capacity factor of 0.0383 or less is based on the unit's status as of December 31, 2000. Reduced operation after December 31, 2000, cannot be used to qualify for a more lenient emission specification under subsection (a)(14) of this section than would otherwise apply to the unit.

(f) Operating restrictions. No person may start or operate any stationary diesel or dual-fuel engine for testing or maintenance of the engine between the hours of 6:00 a.m. and noon, except:

(1) for specific manufacturer's recommended testing requiring a run of over 18 consecutive hours;

(2) to verify reliability of emergency equipment (e.g., emergency generators or pumps) immediately after unforeseen repairs. Routine maintenance such as an oil change is not considered to be an unforeseen repair; or

(3) firewater pumps for emergency response training conducted from April 1 through October 31.

**§117.423. Source Cap.**

(a) An owner or operator may achieve compliance with the nitrogen oxides (NO<sub>x</sub>) emission specifications of §117.405 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) or §117.410 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration), by achieving equivalent NO<sub>x</sub> emission reductions obtained by compliance with a source cap emission limitation in accordance with the requirements of this section. Each equipment category at a source whose individual emission units would otherwise be subject to the NO<sub>x</sub> emission specifications of §117.405 or §117.410 of this title may be included in the source cap. Any equipment category included in the source cap must include all emission units belonging to that category. Equipment categories include, but are not limited to, the following: steam generation, electrical generation, and units with the same product outputs, such as ethylene cracking furnaces. All emission units not included in the source cap must comply with the requirements of §117.405 or §117.410 of this title.

(b) The source cap allowable mass emission rate must be calculated as follows.

(1) A rolling 30-day average emission cap must be calculated for all emission units included in the source cap using the following equation.

Figure: 30 TAC §117.423(b)(1)

$$Cap_{30day} = \sum_{i=1}^N (H_i \times R_i)$$

Where:

$Cap_{30day}$  = the nitrogen oxides (NO<sub>x</sub>) 30-day rolling average emission cap in pounds per day;

$i$  = each emission unit in the emission cap;

$N$  = the total number of emission units in the emission cap;

$H_i$  = for units subject to §117.405 of this title, the actual historical average of the daily heat input for each unit included in the source cap, in million British thermal units per day (MMBtu/day), as certified to the executive director, for a 24 consecutive month period between January 1, 2012 and December 31, 2013. For units subject to §117.410 of this title, the actual historical average of the daily heat input for each unit included in the source cap, in MMBtu/day, as certified to the executive director, for a 24 consecutive month period between January 1, 2000, and December 31, 2001. All sources included in the source cap must use the same 24 consecutive month period. If sufficient historical data are not available for this calculation, the executive director and the United States Environmental Protection Agency may approve another method for calculating  $H_i$ ; and

$R_i$  = the lowest of:

- (i) the applicable NO<sub>x</sub> emission specification of §117.405 or §117.410 of this title;
- (ii) any permit NO<sub>x</sub> emission limit for any unit subject to a permit issued in accordance with Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), in pounds per million British thermal units (lb/MMBtu), that applies to emission unit  $i$  in the absence of trading,

in the Dallas-Fort Worth eight-hour ozone nonattainment area, in effect on December 31, 2012, for units subject to §117.405 of this title, and December 31, 2000, for units subject to §117.410 of this title; and

(iii) the actual emission rate as of the dates specified in clause (ii) of this figure. All calculations of emission rates must presume that emission controls in effect on the dates specified in clause (ii) of this figure are in effect for the two-year period used in calculating the actual heat input.

(2) A maximum daily cap must be calculated for all emission units included in the source cap using the following equation.

Figure: 30 TAC §117.423(b)(2) (No change to the figure as it exists in TAC)

(3) Each emission unit included in the source cap is subject to the requirements of both paragraphs (1) and (2) of this subsection at all times.

(4) For stationary internal combustion engines, the source cap allowable emission rate must be calculated in pounds per hour using the following equation.

Figure: 30 TAC §117.423(b)(4)

$$\text{Cap}_{\text{ICE}} = \frac{\text{MRC} \times \text{ES}}{\text{HR} \times (454 \times 10^{-6})}$$

Where:

Cap<sub>ICE</sub> = source cap allowable emission rate in pounds per hour;

ES = emission specification in grams per horsepower-hour (g/hp-hr);

MRC = engine manufacturer's rated heat input in million British thermal units per hour;  
and

HR = engine manufacturer's rated heat rate at the engines horsepower (hp) rating, in British thermal units per horsepower-hour.

(5) For stationary gas turbines, the source cap allowable emission rate must be calculated in pounds per hour using the following equations.

Figure: 30 TAC §117.423(b)(5)

$$C_{in\text{stack}} = A_{NO_x} \times \left(1 - \frac{\%H_2O}{100}\right) \times \left[ \left(20.9 - \frac{\%O_2}{\left(1 - \frac{\%H_2O}{100}\right)}\right) \times \frac{1}{5.9} \right]$$

$$Cap_{GT} = C_{in\text{stack}} \times MF \times \left(\frac{46}{28} \times 10^{-6}\right)$$

Where:

C<sub>in<sub>stack</sub></sub> = the nitrogen oxides (NO<sub>x</sub>) in-stack concentration in parts per million by volume (ppmv);

A<sub>NO<sub>x</sub></sub> = the applicable NO<sub>x</sub> emission specification of §117.405 or §117.410 of this title (expressed in parts per million by volume NO<sub>x</sub> at 15% oxygen (O<sub>2</sub>), dry basis);

$\%H_2O$  = the volume percent of water in the stack gases, as calculated from the manufacturer's data, or other data as approved by the executive director, at megawatt (MW) rating and International Standards Organization (ISO) flow conditions;

$\%O_2$  = the volume percent of  $O_2$  in the stack gases on a wet basis, as calculated from the manufacturer's data or other data as approved by the executive director, at MW rating and ISO conditions;

$Cap_{GT}$  = source cap allowable emission rate in pounds per hour; and

MF = the turbine manufacturer's rated exhaust flow rate, in pounds per hour at MW rating and ISO flow conditions.

(c) The owner or operator who elects to comply with this section shall:

(1) for each unit included in the source cap, either:

(A) install, calibrate, maintain, and operate a continuous exhaust  $NO_x$  monitor, carbon monoxide (CO) monitor, an oxygen ( $O_2$ ) (or carbon dioxide ( $CO_2$ )) diluent monitor, and a totalizing fuel flow meter in accordance with the requirements of §117.440 of this title (relating to Continuous Demonstration of Compliance). The required continuous emissions monitoring systems (CEMS) and fuel flow meters must be used to measure  $NO_x$ , CO, and  $O_2$  (or  $CO_2$ ) emissions and fuel use for each affected unit and must be used to demonstrate continuous compliance with the source cap;

(B) install, calibrate, maintain, and operate a predictive emissions monitoring system (PEMS) and a totalizing fuel flow meter in accordance with the

requirements of §117.440 of this title. The required PEMS and fuel flow meters must be used to measure NO<sub>x</sub>, CO, and O<sub>2</sub> (or CO<sub>2</sub>) emissions and fuel flow for each affected unit and must be used to demonstrate continuous compliance with the source cap; or

(C) for units not subject to continuous monitoring requirements, use the maximum emission rate as measured by hourly emission rate testing conducted in accordance with §117.435(d) of this title (relating to Initial Demonstration of Compliance) in lieu of CEMS or PEMS. Emission rates for these units are limited to the maximum emission rates obtained from testing conducted under §117.435(d) of this title; and

(2) for each operating unit equipped with CEMS, either use a PEMS in accordance with §117.440 of this title, or the maximum emission rate as measured by hourly emission rate testing conducted in accordance with §117.435(d) of this title, to provide emissions compliance data during periods when the CEMS is off-line. The methods specified in 40 Code of Federal Regulations §75.46 must be used to provide emissions substitution data for units equipped with PEMS.

(d) The owner or operator of any units subject to a source cap shall maintain daily records indicating the NO<sub>x</sub> emissions from each unit and the total fuel usage for each unit and include a total NO<sub>x</sub> emissions summation and total fuel usage for all units under the source cap on a daily basis. Records must also be retained in accordance with §117.445 of this title (relating to Notification, Recordkeeping, and Reporting Requirements).

(e) The owner or operator of any units operating under this provision shall report any exceedance of the source cap emission limit within 48 hours to the appropriate regional office. The owner or operator shall then follow up within 21 days of the exceedance with a written report that includes an analysis of the cause for the exceedance with appropriate data to demonstrate the amount of emissions in excess of the applicable limit and the necessary corrective actions taken by the company to assure future compliance. Additionally, the owner or operator shall submit semiannual reports for the monitoring systems in accordance with §117.445 of this title.

(f) The owner or operator shall demonstrate initial compliance with the source cap in accordance with the schedule specified in §117.9030 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

(g) For compliance with §117.405 or §117.410 of this title, a unit that has been permanently retired or decommissioned and rendered inoperable may be included in the source cap under the following conditions.

(1) Permanent shutdowns must have occurred after December 31, 2012, for units subject to §117.405 of this title, and December 31, 2000, for units subject to §117.410 of this title.

(2) The source cap emission limit for retired units is calculated in accordance with subsection (b) of this section.

(3) The actual heat input must be calculated according to subsection (b)(1) of this section. If the unit was not in service 24 consecutive months between January 1, 2012, and December 31, 2013, for units subject to §117.405 of this title, and between January 1, 2000, and December 31, 2001, for units subject to §117.410 of this title, the actual heat input must be the average daily heat input for the continuous time period that the unit was in service, consistent with the heat input used to represent the unit's emissions in the 2012 modeling inventory for units subject to §117.405 of this title, and in the 2000 attainment demonstration modeling inventory for units subject to §117.410 of this title. The maximum heat input must be the maximum heat input, as certified to the executive director, allowed or possible (whichever is lower) in a 24-hour period.

(4) The owner or operator shall certify the unit's operational level and maximum rated capacity.

(5) Emission reductions from permanent shutdowns or curtailments that have been used for netting or offset purposes under the requirements of Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) may not be included in the baseline for establishing the cap.

(h) An owner or operator who chooses to use the source cap option shall include in the initial control plan, if required to be filed under §117.450 of this title (relating to Initial Control Plan Procedures), a plan for initial compliance. The owner or operator shall include in the initial control plan the identification of the election to use the source cap procedure as specified in this section to achieve compliance with this section and shall specifically identify all sources that will be included in the source cap. The owner or operator shall also include in the initial control plan the method of calculating the actual heat input for each unit included in the source cap, as specified in subsection (b)(1) of this section.

(i) For the purposes of determining compliance with the source cap emission limit, the contribution of each affected unit that is operating during a startup, shutdown, or emissions event as defined in §101.1 of this title (relating to Definitions) must be calculated from the NO<sub>x</sub> emission rate, as measured by the initial demonstration of compliance, for that unit, unless the owner or operator provides data demonstrating to the satisfaction of the executive director that actual emissions were less than maximum emissions during such periods.

**§117.425. Alternative Case Specific Specifications.**

(a) Where a person can demonstrate that an affected unit cannot attain the applicable requirements of the carbon monoxide (CO) or ammonia specifications of §117.405(d) of this title (relating to Emission Specifications for Reasonably Available

Control Technology (RACT)) or §117.410(c) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstrations), the executive director may approve emission specifications different from the CO or ammonia specifications in §117.405(d) or §117.410(c) of this title for that unit. The executive director:

(1) shall consider on a case-by-case basis the technological and economic circumstances of the individual unit;

(2) shall determine that such specifications are the result of the lowest emission specification the unit is capable of meeting after the application of controls to meet the nitrogen oxides emission specifications of §117.405 or §117.410 of this title, as applicable; and

(3) in determining whether to approve alternative emission specifications, may take into consideration the ability of the plant where the unit is located to meet emission specifications through plant-wide averaging at maximum capacity.

(b) Any owner or operator affected by the executive director's decision to deny an alternative case specific emission specification may file a motion to overturn the executive director's decision. The requirements of §50.139 of this title (relating to Motion to Overturn Executive Director's Decision) apply. Executive director approval does not necessarily constitute satisfaction of all federal requirements nor eliminate the need for approval by the

United States Environmental Protection Agency in cases where specified criteria for determining equivalency have not been clearly identified in applicable sections of this division.

**§117.430. Operating Requirements.**

(a) The owner or operator shall operate any unit subject to the source cap emission limits of §117.423 of this title (relating to Source Cap) in compliance with those limitations.

(b) All units subject to the emission specifications of §117.405 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) or §117.410 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) or §117.423 of this title must be operated so as to minimize nitrogen oxides (NO<sub>x</sub>) emissions, consistent with the emission control techniques selected, over the unit's operating or load range during normal operations. Such operational requirements include the following.

(1) Each boiler, except for wood-fired boilers, must be operated with oxygen (O<sub>2</sub>), carbon monoxide (CO), or fuel trim.

(2) Each boiler and process heater controlled with forced draft flue gas recirculation (FGR) to reduce NO<sub>x</sub> emissions must be operated such that the proportional

design rate of FGR is maintained, consistent with combustion stability, over the operating range.

(3) Each boiler and process heater controlled with induced draft FGR to reduce NO<sub>x</sub> emissions must be operated such that the operation of FGR over the operating range is not restricted by artificial means.

(4) Each unit controlled with steam or water injection must be operated such that injection rates are maintained to limit NO<sub>x</sub> concentrations to less than or equal to the NO<sub>x</sub> concentrations achieved at maximum rated capacity (corrected to 15% O<sub>2</sub> on a dry basis for stationary gas turbines).

(5) Each unit controlled with post-combustion control techniques must be operated such that the reducing agent injection rate is maintained to limit NO<sub>x</sub> concentrations to less than or equal to the NO<sub>x</sub> concentrations achieved at maximum rated capacity.

(6) Each stationary internal combustion engine controlled with nonselective catalytic reduction must be equipped with an automatic air-fuel ratio (AFR) controller that operates on exhaust O<sub>2</sub> or CO control and maintains AFR in the range required to meet the engine's applicable emission specifications.

(7) Each stationary internal combustion engine must be checked for proper operation of the engine according to §117.8140(b) of this title (relating to Emission Monitoring for Engines).

**§117.435. Initial Demonstration of Compliance.**

(a) The owner or operator of any unit subject to the emission specifications of this division shall test the unit as follows.

(1) The unit must be tested for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and oxygen (O<sub>2</sub>) emissions while firing gaseous fuel or, as applicable, liquid and solid fuel.

(2) Units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control must be tested for ammonia emissions.

(3) Initial demonstration of compliance testing must be performed in accordance with the schedule specified in §117.9030 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

(b) The initial demonstration of compliance tests required by subsection (a) of this section must use the methods referenced in subsection (d) or (e) of this section and must be used for determination of initial compliance with the emission specifications of this

division. Test results must be reported in the units of the applicable emission specifications and averaging periods.

(c) Any continuous emissions monitoring system (CEMS) or any predictive emissions monitoring system (PEMS) required by §117.440 of this title (relating to Continuous Demonstration of Compliance) must be installed and operational before conducting testing under subsection (a) of this section. Verification of operational status must, at a minimum, include completion of the initial monitor certification and the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device or system.

(d) Compliance with the emission specifications of this division for units operating without CEMS or PEMS must be demonstrated according to the requirements of §117.8000 of this title (relating to Stack Testing Requirements).

(e) Initial compliance with the emission specifications of this division for units operating with CEMS or PEMS in accordance with §117.440 of this title, must be demonstrated after monitor certification testing using the CEMS or PEMS as follows.

(1) For boilers and process heaters complying with a NO<sub>x</sub> emission specification in pounds per million British thermal units (lb/MMBtu) on a rolling 30-day average, NO<sub>x</sub> emissions from the unit are monitored for 30 successive unit operating days

and the 30-day average emission rate is used to determine compliance with the NO<sub>x</sub> emission specification. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) For units complying with a NO<sub>x</sub> emission specification on a block one-hour average, any one-hour period while operating at the maximum rated capacity, or as near thereto as practicable is used to determine compliance with the NO<sub>x</sub> emission specification.

(3) For units complying with a CO emission specification, on a rolling 24-hour average, any 24-hour period is used to determine compliance with the CO emission specification.

(4) For units complying with §117.423 of this title (relating to Source Cap) a rolling 30-day average of total daily pounds of NO<sub>x</sub> emissions from the units are monitored (or calculated in accordance with §117.423(c) of this title) for 30 successive source operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>x</sub> emission limit. The 30-day average emission rate is calculated as the average of all daily emissions data recorded by the monitoring and recording system during the 30-day test period. There must be no exceedances of the maximum daily cap during the 30-day test period.

(f) Compliance stack test reports must include the information required in §117.8010 of this title (relating to Compliance Stack Test Reports).

**§117.440. Continuous Demonstration of Compliance.**

(a) Totalizing fuel flow meters. The owner or operator of units listed in this subsection shall install, calibrate, maintain, and operate a totalizing fuel flow meter, with an accuracy of  $\pm 5\%$ , to individually and continuously measure the gas and liquid fuel usage. A computer that collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer. The owner or operator must continuously operate the totalizing fuel flow meter at least 95% of the time when the unit is operating during a calendar year. For the purpose of compliance with this subsection for units having pilot fuel supplied by a separate fuel system or from an unmonitored portion of the same fuel system, the fuel flow to pilots may be calculated using the manufacturer's design flow rates rather than measured with a fuel flow meter. The calculated pilot fuel flow rate must be added to the monitored fuel flow when fuel flow is totaled.

(1) The units are the following units subject to §117.405 (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) or §117.410 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstrations):

(A) boilers (excluding wood-fired boilers that must comply by maintaining records of fuel usage as required in §117.445(f) of this title (relating to Notification, Recordkeeping, and Reporting Requirements) or monitoring in accordance with paragraph (2)(A) of this subsection);

(B) process heaters;

(C) duct burners used in turbine exhaust ducts;

(D) stationary, reciprocating internal combustion engines;

(E) stationary gas turbines;

(F) lime kilns

(G) brick and ceramic kilns;

(H) heat treating furnaces;

(I) reheat furnaces;

(J) lead smelting blast (cupola) and reverberatory furnaces;

(K) glass and fiberglass/mineral wool melting furnaces;

(L) incinerators (excluding vapor streams resulting from vessel cleaning routed to an incinerator, provided that fuel usage is quantified using good engineering practices, including calculation methods in general use and accepted in new source review permitting in Texas. All other fuel and vapor streams must be monitored in accordance with this subsection);

(M) gas-fired glass, fiberglass, and mineral wool curing ovens;

(N) natural gas-fired ovens and heaters; and

(O) natural gas-fired dryers used in organic solvent, printing ink, clay, brick, ceramic, and calcining and vitrifying processes.

(2) The following are alternatives to the fuel flow monitoring requirements of paragraph (1) of this subsection.

(A) Units operating with a nitrogen oxides (NO<sub>x</sub>) and diluent continuous emissions monitoring system (CEMS) under subsection (f) of this section may monitor stack exhaust flow using the flow monitoring specifications of 40 Code of Federal

Regulations (CFR) Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75, Appendix A.

(B) Units that vent to a common stack with a NO<sub>x</sub> and diluent CEMS under subsection (f) of this section may use a single totalizing fuel flow meter.

(C) Diesel engines operating with run time meters may meet the fuel flow monitoring requirements of this subsection through monthly fuel use records maintained for each engine.

(D) Stationary reciprocating internal combustion engines and gas turbines equipped with a continuous monitoring system that continuously monitors horsepower and hours of operation are not required to install totalizing fuel flow meters. The continuous monitoring system must be installed, calibrated, maintained, and operated according to manufacturers' recommended procedures.

(b) Oxygen (O<sub>2</sub>) monitors.

(1) The owner or operator shall install, calibrate, maintain, and operate an O<sub>2</sub> monitor to measure exhaust O<sub>2</sub> concentration on the following units operated with an annual heat input greater than 2.2(10<sup>11</sup>) British thermal units per year (Btu/yr):

(A) boilers with a rated heat input greater than or equal to 100 million British thermal units per hour (MMBtu/hr); and

(B) process heaters with a rated heat input greater than or equal to 100 MMBtu/hr, except:

(i) as provided in subsection (g) of this section; and

(ii) for process heaters operating with a carbon dioxide (CO<sub>2</sub>) CEMS for diluent monitoring under subsection (f) of this section.

(2) The O<sub>2</sub> monitors required by this subsection are for process monitoring (predictive monitoring inputs, boiler trim, or process control) and are only required to meet the location specifications and quality assurance procedures referenced in subsection (f) of this section if O<sub>2</sub> is the monitored diluent under that subsection. However, if new O<sub>2</sub> monitors are required as a result of this subsection, the criteria in subsection (f) of this section should be considered the appropriate guidance for the location and calibration of the monitors.

(c) NO<sub>x</sub> monitors.

(1) The owner or operator of units listed in this paragraph shall install, calibrate, maintain, and operate a CEMS or predictive emissions monitoring system (PEMS) to monitor exhaust NO<sub>x</sub>. The units are:

(A) units with a rated heat input greater than or equal to 100 MMBtu/hr that are subject to §117.405(a) or (b) or §117.410(a) of this title;

(B) stationary gas turbines with a megawatt (MW) rating greater than or equal to 30 MW operated more than 850 hours per year;

(C) units that use a chemical reagent for reduction of NO<sub>x</sub>;

(D) units that the owner or operator elects to comply with the NO<sub>x</sub> emission specifications of §117.405(a) or (b) of this title or §117.410(a) of this title using a pound per MMBtu (lb/MMBtu) limit on a 30-day rolling average;

(E) lime kilns; and

(F) brick kilns and ceramic kilns.

(2) Units subject to the NO<sub>x</sub> CEMS requirements of 40 CFR Part 75 are not required to install CEMS or PEMS under this subsection.

(3) The owner or operator shall use one of the following methods to provide substitute emissions compliance data during periods when the NO<sub>x</sub> monitor is off-line:

(A) if the NO<sub>x</sub> monitor is a CEMS:

(i) subject to 40 CFR Part 75, use the missing data procedures specified in 40 CFR Part 75, Subpart D (Missing Data Substitution Procedures); or

(ii) subject to 40 CFR Part 75, Appendix E, use the missing data procedures specified in 40 CFR Part 75, Appendix E, §2.5 (Missing Data Procedures);

(B) use 40 CFR Part 75, Appendix E monitoring in accordance with §117.1340(d) of this title (relating to Continuous Demonstration of Compliance);

(C) if the NO<sub>x</sub> monitor is a PEMS:

(i) use the methods specified in 40 CFR Part 75, Subpart D; or

(ii) use calculations in accordance with §117.8110(b) of this title (relating to Emission Monitoring System Requirements for Utility Electric Generation Sources); or

(D) the maximum block one-hour emission rate as measured during the initial demonstration of compliance required in §117.435(e) of this title (relating to Initial Demonstration of Compliance).

(d) Ammonia monitoring requirements. The owner or operator of any unit subject to §117.405(a) or (b) or §117.410(a) of this title and the ammonia emission specification of §117.405(d)(2) or §117.410(c)(2) of this title shall monitor ammonia emissions from the unit according to the requirements of §117.8130 of this title (relating to Ammonia Monitoring).

(e) Carbon monoxide (CO) monitoring. The owner or operator shall monitor CO exhaust emissions from each unit listed in subsection (c)(1) of this section using one or more of the methods specified in §117.8120 of this title (relating to Carbon Monoxide (CO) Monitoring).

(f) CEMS requirements. The owner or operator of any CEMS used to meet a pollutant monitoring requirement of this section shall comply with the requirements of §117.8100(a) of this title (relating to Emission Monitoring System Requirements for Industrial, Commercial, and Institutional Sources).

(g) PEMS requirements. The owner or operator of any PEMS used to meet a pollutant monitoring requirement of this section shall comply with the following.

(1) The PEMS must predict the pollutant emissions in the units of the applicable emission limitations of this division (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

(2) The PEMS must meet the requirements of §117.8100(b) of this title.

(h) Engine monitoring. The owner or operator of any stationary gas engine subject to the emission specifications of this division shall stack test engine NO<sub>x</sub> and CO emissions as specified in §117.8140(a) of this title (relating to Emission Monitoring for Engines).

(i) Run time meters. The owner or operator of any stationary gas turbine or stationary internal combustion engine claimed exempt using the exemption of §117.403(a)(7)(D), (8), or (9) or (b)(2)(D) of this title (relating to Exemptions) shall record the operating time with a non-resettable elapsed run time meter.

(j) Data used for compliance. After the initial demonstration of compliance required by §117.435 of this title, the methods required in this section must be used to determine compliance with the emission specifications of §117.405(a) or (b) or §117.410(a) of this title. For enforcement purposes, the executive director may also use other commission

compliance methods to determine whether the unit is in compliance with applicable emission specifications.

(k) Testing requirements.

(1) The owner or operator of units that are subject to the emission specifications of §117.405(a) or (b) or §117.410(a) of this title shall test the units as specified in §117.435 of this title in accordance with the applicable schedule specified in §117.9030 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

(2) The owner or operator of any unit not equipped with CEMS or PEMS that are subject to the emission specifications of §117.405(a) or (b) of this title or §117.410(a) of this title shall retest the unit as specified in §117.435 of this title within 60 days after any modification that could reasonably be expected to increase the NO<sub>x</sub> emission rate.

**§117.445. Notification, Recordkeeping, and Reporting Requirements.**

(a) Startup and shutdown records. For units subject to the startup and/or shutdown provisions of §101.222 of this title (relating to Demonstrations), hourly records must be made of startup and/or shutdown events and maintained for a period of at least two years. Records must be available for inspection by the executive director, the United States

Environmental Protection Agency, and any local air pollution control agency having jurisdiction upon request. These records must include, but are not limited to: type of fuel burned; quantity of each type of fuel burned; and the date, time, and duration of the procedure.

(b) Notification. The owner or operator of a unit subject to the emission specifications of §117.405(a) or (b) of this title (relating to Emission Specifications for Reasonably Available Control Technology) or §117.410(a) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall submit written notification of any continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS) relative accuracy test audit (RATA) conducted under §117.440 of this title (relating to Continuous Demonstration of Compliance) or any testing conducted under §117.435 of this title (relating to Initial Demonstration of Compliance) at least 15 days in advance of the date of the RATA or testing to the appropriate regional office and any local air pollution control agency having jurisdiction.

(c) Reporting of test results. The owner or operator of an affected unit shall furnish the Office of Compliance and Enforcement, the appropriate regional office, and any local air pollution control agency having jurisdiction a copy of any testing conducted under §117.435 of this title and any CEMS or PEMS RATA conducted under §117.440 of this title:

(1) within 60 days after completion of such testing or evaluation; and

(2) not later than the compliance schedule specified in §117.9030 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

(d) Semiannual reports. The owner or operator of a unit required to install a CEMS or PEMS under §117.440 of this title shall report in writing to the executive director on a semiannual basis any exceedance of the applicable emission specifications of this division and the monitoring system performance. All reports must be postmarked or received by the 30th day following the end of each calendar semiannual period. Written reports must include the following information:

(1) the magnitude of excess emissions computed in accordance with 40 Code of Federal Regulations §60.13(h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the unit operating time during the reporting period. For units complying with §117.423 of this title (relating to Source Cap), excess emissions are each daily period that the total nitrogen oxides (NO<sub>x</sub>) emissions exceed the rolling 30-day average or the maximum daily NO<sub>x</sub> cap;

(2) specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected unit, the nature and cause of

any malfunction (if known), and the corrective action taken or preventative measures adopted;

(3) the date and time identifying each period when the continuous monitoring system was inoperative, except for zero and span checks and the nature of the system repairs or adjustments;

(4) when no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report; and

(5) if the total duration of excess emissions for the reporting period is less than 1.0% of the total unit operating time for the reporting period and the CEMS or PEMS downtime for the reporting period is less than 5.0% of the total unit operating time for the reporting period, only a summary report form (as outlined in the latest edition of the commission's *Guidance for Preparation of Summary, Excess Emission, and Continuous Monitoring System Reports*) must be submitted, unless otherwise requested by the executive director. If the total duration of excess emissions for the reporting period is greater than or equal to 1.0% of the total unit operating time for the reporting period or the CEMS or PEMS downtime for the reporting period is greater than or equal to 5.0% of the total unit operating time for the reporting period, a summary report and an excess emission report must both be submitted.

(e) Reporting for engines. The owner or operator of any gas-fired engine subject to the emission specifications in §117.405 or §117.410 of this title shall report in writing to the executive director on a semiannual basis any excess emissions and the air-fuel ratio monitoring system performance. All reports must be postmarked or received by the 30th day following the end of each calendar semiannual period. Written reports must include the following information:

(1) the magnitude of excess emissions (based on the quarterly emission checks of §117.430(b)(7) of this title (relating to Operating Requirements) and the biennial emission testing required for demonstration of emissions compliance in accordance with §117.440(h) of this title, computed in pounds per hour and grams per horsepower-hour, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the engine operating time during the reporting period; and

(2) specific identification, to the extent feasible, of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the engine or emission control system, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

(f) Recordkeeping. The owner or operator of a unit subject to the requirements of this division shall maintain written or electronic records of the data specified in this

subsection. Such records must be kept for a period of at least five years and must be made available upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or local air pollution control agencies having jurisdiction. The records must include:

(1) for each unit subject to §117.440(a) of this title, records of annual fuel usage;

(2) for each unit using a CEMS or PEMS in accordance with §117.440 of this title, monitoring records of:

(A) hourly emissions and fuel usage (or stack exhaust flow) for units complying with an emission specification enforced on a block one-hour average; or

(B) daily emissions and fuel usage (or stack exhaust flow) for units complying with an emission specification enforced on a daily or rolling 30-day average.

Emissions must be recorded in units of:

(i) pounds per million British thermal units (lb/MMBtu) heat input; and

(ii) pounds or tons per day;

(3) for each stationary internal combustion engine subject to the emission specifications of this division, records of:

(A) emissions measurements required by:

(i) §117.430(b)(7) of this title; and

(ii) §117.440(h) of this title;

(B) catalytic converter, air-fuel ratio controller, or other emissions-related control system maintenance, including the date and nature of corrective actions taken; and

(C) daily average horsepower and total daily hours of operation for each engine that the owner or operator elects to use the alternative monitoring system allowed under §117.440(a)(2)(D) of this title;

(4) for units claimed exempt from emission specifications using the exemption of §117.403(a)(7)(D), (8), or (9) or (b)(2)(D) of this title (relating to Exemptions), records of monthly hours of operation, for exemptions based on hours per year of operation. In addition, for each turbine or engine claimed exempt under

§117.403(a)(7)(D) or (b)(2)(D) of this title, written records must be maintained of the purpose of turbine or engine operation and, if operation was for an emergency situation, identification of the type of emergency situation and the start and end times and date(s) of the emergency situation;

(5) records of ammonia measurements specified in §117.440(d) of this title;

(6) records of carbon monoxide measurements specified in §117.440(e) of this title;

(7) records of the results of initial certification testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS or PEMS;

(8) records of the results of performance testing, including initial demonstration of compliance testing conducted in accordance with §117.435 of this title;

(9) for each stationary diesel or dual-fuel engine, records of each time the engine is operated for testing and maintenance of the engine, including:

(A) date(s) of operation;

(B) start and end times of operation;

(C) identification of the engine; and

(D) total hours of operation for each month and for the most recent 12 consecutive months; and

(10) for lime kilns that comply with the alternative site-wide production rate weighted average emission specification in §117.410(a)(7)(A)(ii) of this title, daily records of:

(A) average NO<sub>x</sub> emission rates in pounds per ton (lb/ton) of calcium oxide (CaO) for each kiln;

(B) production rate of CaO for each kiln in tons per day; and

(C) site-wide production rate weighted average NO<sub>x</sub> emission rate in lb/ton of CaO.

**§117.450. Initial Control Plan Procedures.**

(a) The owner or operator of any unit at a major source of nitrogen oxides (NO<sub>x</sub>) in the Dallas-Fort Worth eight-hour ozone nonattainment area that is subject to §117.405(a)

or (b) of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) or §117.410(a) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall submit an initial control plan. The control plan must include:

(1) a list of all combustion units at the account that are listed in §117.405(a) or (b) or §117.410(a) of this title. The list must include for each unit:

(A) the maximum rated capacity;

(B) anticipated annual capacity factor;

(C) estimated or measured NO<sub>x</sub> emission data in the units associated with the category of equipment from §117.405(a) or (b) or §117.410(a) of this title;

(D) the method of determination for the NO<sub>x</sub> emission data required by subparagraph (C) of this paragraph;

(E) the facility identification number and emission point number as submitted to the Emissions Assessment Section of the commission; and

(F) the emission point number as listed on the Maximum Allowable Emissions Rate Table of any applicable commission permit;

(2) identification of all units with a claimed exemption from the emission specifications of §117.405(a) or (b) or §117.410(a) of this title and the rule basis for the claimed exemption;

(3) identification of the election to use the source cap emission limit as specified in §117.423 of this title (relating to Source Cap) to achieve compliance with this rule and a list of the units to be included in the source cap;

(4) a list of units to be controlled and the type of control to be applied for all such units, including an anticipated construction schedule;

(5) a list of units requiring operating modifications to comply with §117.430(b) of this title (relating to Operating Requirements) and the type of modification to be applied for all such units, including an anticipated construction schedule;

(6) for units required to install totalizing fuel flow meters in accordance with §117.440(a) of this title (relating to Continuous Demonstration of Compliance), indication of whether the devices are currently in operation, and if so, whether they have been installed as a result of the requirements of this chapter; and

(7) for units required to install continuous emissions monitoring systems or predictive emissions monitoring systems in accordance with §117.440 of this title, indication of whether the devices are currently in operation, and if so, whether they have been installed as a result of the requirements of this chapter.

(b) The initial control plan must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for initial control plans in §117.9030 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

**§117.452. Final Control Plan Procedures for Reasonably Available Control Technology.**

(a) The owner or operator of any unit subject to §117.405 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) at a major source of nitrogen oxides (NO<sub>x</sub>) shall submit a final control report to show compliance with the requirements of §117.405 of this title. The report must include:

(1) the section used to demonstrate compliance, either:

(A) §117.405 of this title;

(B) §117.423 of this title (relating to Source Cap); or

(C) §117.9800 of this title (relating to Use of Emission Credits for Compliance);

(2) the method of NO<sub>x</sub> control for each unit;

(3) the emissions measured by testing required in §117.435 of this title (relating to Initial Demonstration of Compliance);

(4) the submittal date, and whether sent to the central or the regional office (or both), of any compliance stack test report or monitor certification report required by §117.435 of this title that is not being submitted concurrently with the final compliance report; and

(5) the specific rule citation for any unit with a claimed exemption from the emission specification of §117.405 of this title.

(b) For sources complying with §117.423 of this title, in addition to the requirements of subsection (a) of this section, the owner or operator shall submit:

(1) the calculations used to calculate the 30-day average and maximum daily source cap allowable emission rates;

(2) a list containing, for each unit in the cap:

(A) the average daily heat input,  $H_i$ , specified in §117.423(b)(1) of this title;

(B) the maximum daily heat input,  $H_{mi}$ , specified in §117.423(b)(2) of this title;

(C) the method of monitoring emissions; and

(D) the method of providing substitute emissions data when the  $\text{NO}_x$  monitoring system is not providing valid data; and

(3) an explanation of the basis of the values of  $H_i$  and  $H_{mi}$ , specified in §117.423(b)(1) and (2) of this title.

(c) The report must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for final control plans in §117.9030(a) of this title (relating to Compliance Schedule for Dallas-Fort

Worth Eight-Hour Ozone Nonattainment Area Major Sources). The plan must be updated with any emission compliance measurements submitted for units using continuous emissions monitoring system or predictive emissions monitoring system and complying with the source cap rolling 30-day average emission limit, according to the applicable schedule given in §117.9030(a) of this title.

**§117.454. Final Control Plan Procedures for Attainment Demonstration  
Emission Specifications.**

(a) The owner or operator of any unit subject to §117.410 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) at a major source of nitrogen oxides (NO<sub>x</sub>) shall submit a final control report to show compliance with the requirements of §117.410 of this title. The report must include:

(1) the section used to demonstrate compliance, either:

(A) §117.410 of this title;

(B) §117.423 of this title (relating to Source Cap); or

(C) §117.9800 of this title (relating to Use of Emission Credits for Compliance);

(2) the method of NO<sub>x</sub> control for each unit;

(3) the emissions measured by testing required in §117.435 of this title (relating to Initial Demonstration of Compliance);

(4) the submittal date, and whether sent to the central or the regional office (or both), of any compliance stack test report or monitor certification report required by §117.435 of this title that is not being submitted concurrently with the final compliance report; and

(5) the specific rule citation for any unit with a claimed exemption from the emission specification of §117.410 of this title.

(b) For sources complying with §117.423 of this title, in addition to the requirements of subsection (a) of this section, the owner or operator shall submit:

(1) the calculations used to calculate the 30-day average and maximum daily source cap allowable emission rates;

(2) a list containing, for each unit in the cap:

(A) the average daily heat input,  $H_i$ , specified in §117.423(b)(1) of this title;

(B) the maximum daily heat input,  $H_{mi}$ , specified in §117.423(b)(2) of this title;

(C) the method of monitoring emissions; and

(D) the method of providing substitute emissions data when the  $\text{NO}_x$  monitoring system is not providing valid data; and

(3) an explanation of the basis of the values of  $H_i$  and  $H_{mi}$ , specified in §117.423(b)(1) and (2) of this title.

(c) The report must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for final control plans in §117.9030 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources). The plan must be updated with any emission compliance measurements submitted for units using continuous emissions monitoring system or predictive emissions monitoring system and complying with the source cap rolling 30-day average emission limit, according to the applicable schedule given in §117.9030 of this title.

**§117.456. Revision of Final Control Plan.**

A revised final control plan may be submitted by the owner or operator, along with any required permit applications. Such a plan must adhere to the requirements and the final compliance dates of this division (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources).

(1) For sources complying with §117.405 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) or §117.410 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration), replacement new units may be included in the control plan.

(2) For sources complying with §117.423 of this title (relating to Source Cap), any new unit must be included in the source cap, if the unit belongs to an equipment category that is included in the source cap.

(3) The revision of the final control plan is subject to the review and approval of the executive director.

**SUBCHAPTER C: COMBUSTION CONTROL AT MAJOR UTILITY ELECTRIC  
GENERATION SOURCES IN OZONE NONATTAINMENT AREAS**

**DIVISION 2: DALLAS-FORT WORTH OZONE NONATTAINMENT AREA**

**UTILITY ELECTRIC GENERATION SOURCES**

**§§117.1100, 117.1103, 117.1105, 117.1110, 117.1115, 117.1120, 117.1125, 117.1135,  
117.1140, 117.1145, 117.1152, 117.1154, 117.1156**

**Statutory Authority**

The repealed sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The repealed sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air.

The repealed sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions.

The repealed sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The repealed sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.1100. Applicability.**

**§117.1103. Exemptions.**

**§117.1105. Emission Specifications for Reasonably Available Control Technology (RACT).**

**§117.1110. Emission Specifications for Attainment Demonstration.**

**§117.1115. Alternative System-Wide Emission Specifications.**

**§117.1120. System Cap.**

**§117.1125. Alternative Case Specific Specifications.**

**§117.1135. Initial Demonstration of Compliance.**

**§117.1140. Continuous Demonstration of Compliance.**

**§117.1145. Notification, Recordkeeping, and Reporting Requirements.**

**§117.1152. Final Control Plan Procedures for Reasonably Available Control  
Technology.**

**§117.1154. Final Control Plan Procedures for Attainment Demonstration  
Emission Specifications.**

**§117.1156. Revision of Final Control Plan.**

**SUBCHAPTER C: COMBUSTION CONTROL AT MAJOR UTILITY ELECTRIC  
GENERATION SOURCES IN OZONE NONATTAINMENT AREAS**

**DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE**

**NONATTAINMENT AREA UTILITY ELECTRIC GENERATION SOURCES**

**§§117.1303, 117.1310, 117.1325, 117.1335, 117.1340, 117.1345, 117.1350, 117.1354**

**Statutory Authority**

The amended sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The amended sections are also adopted under THSC, §382.016, concerning Monitoring

Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions. The amended sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.1303. Exemptions.**

(a) Emission specifications for attainment demonstrations. Units exempt from the provisions of §117.1310 and §117.1340 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration; and Continuous Demonstration of Compliance), except as specified in §117.1340(i) or (j) of this title, include the following:

(1) any auxiliary steam boiler with an annual heat input less than or equal to  $2.2(10^{11})$  British thermal units per year; or

(2) stationary gas turbines and engines that are:

(A) used solely to power other engines or gas turbines during startups;

or

(B) demonstrated to operate less than 850 hours per year, based on a rolling 12-month basis.

(b) Emergency fuel oil firing.

(1) The emissions specifications of §117.1310 of this title do not apply during an emergency operating condition declared by the Electric Reliability Council of Texas, or any other emergency operating condition that necessitates oil firing. All findings that emergency operating conditions exist are subject to the approval of the executive director.

(2) The owner or operator of an affected unit shall give the executive director and any local air pollution control agency having jurisdiction verbal notification as soon as possible but no later than 48 hours after declaration of the emergency. Verbal notification must identify the anticipated date and time oil firing will begin, duration of the emergency period, affected oil-fired equipment, and quantity of oil to be fired in each unit, and must be followed by written notification containing this information no later than five days after declaration of the emergency.

(3) The owner or operator of an affected unit shall give the executive director and any local air pollution control agency having jurisdiction final written notification as soon as possible but no later than two weeks after the termination of emergency fuel oil firing. Final written notification must identify the actual dates and times that oil firing began and ended, duration of the emergency period, affected oil-fired equipment, and quantity of oil fired in each unit.

**§117.1310. Emission Specifications for Eight-Hour Attainment Demonstration.**

(a) Nitrogen oxides (NO<sub>x</sub>) emission specifications. The owner or operator of any utility boiler, auxiliary steam boiler, or stationary gas turbine subject to this division shall not allow the discharge into the atmosphere, emissions of NO<sub>x</sub> in excess of the following:

(1) utility boilers:

(A) 0.06 pounds per million British thermal units (lb/MMBtu) heat input from utility boilers that are part of a small utility system, as defined in §117.10 of this title (relating to Definitions):

(i) on a rolling 24-hour average basis during the months of March through October of each calendar year; and

(ii) on a rolling 30-day average basis during the months of November, December, January, and February of each calendar year;

(B) 0.033 lb/MMBtu heat input from utility boilers that are part of a large utility system, as defined in §117.10 of this title:

(i) on a rolling 24-hour average basis during the months of March through October of each calendar year; and

(ii) on a rolling 30-day average basis during the months of November, December, January, and February of each calendar year;

(C) 0.50 pounds per megawatt-hour output on an annual average basis; or

(D) 0.033 lb/MMBtu heat input on a system-wide heat input weighted average basis for utility boilers that are part of a large utility system, as defined in §117.10 of this title:

(i) on a rolling 168-hour average basis for each hour during which fuel was combusted in any unit in the system; and

(ii) determined according to the following equation:

Figure: 30 TAC §117.1310(a)(1)(D)(ii) (No change to the figure as it exists in TAC)

(2) auxiliary steam boilers:

(A) 0.26 lb/MMBtu heat input on a rolling 24-hour average and 0.20 lb/MMBtu heat input on a 30-day rolling average while firing natural gas or a combination of natural gas and waste oil;

(B) 0.30 lb/MMBtu heat input on a rolling 24-hour averaging period while firing fuel oil only;

(C) the heat input weighted average of the applicable emission specifications specified in subparagraphs (A) and (B) of this paragraph on a rolling 24-hour averaging period while firing a mixture of natural gas and fuel oil, as follows:

Figure: 30 TAC §117.1310(a)(2)(C) (No change to the figure as it exists in TAC)

(D) for each auxiliary steam boiler that is an affected facility as defined by New Source Performance Standards (NSPS) 40 Code of Federal Regulations Part 60,

Subparts D, Db, or Dc, the applicable NSPS NO<sub>x</sub> emission limit, unless the boiler is also subject to a more stringent permit emission limit, in which case the more stringent emission limit applies. Each auxiliary steam boiler subject to an emission specification under this subparagraph is not subject to the emission specifications of subparagraphs (A), (B), or (C) of this paragraph.

(3) stationary gas turbines:

(A) with a megawatt (MW) rating greater than or equal to 30 MW and an annual electric output in megawatt-hr (MW-hr) of greater than or equal to the product of 2,500 hours and the MW rating of the unit, NO<sub>x</sub> emissions in excess of a block one-hour average of:

(i) 42 parts per million by volume (ppmv) at 15% oxygen (O<sub>2</sub>), dry basis, while firing natural gas; and

(ii) 65 ppmv at 15% O<sub>2</sub>, dry basis, while firing fuel oil; and

(B) used for peaking service with an annual electric output in MW-hr of less than the product of 2,500 hours and the MW rating of the unit, NO<sub>x</sub> emissions in excess of a block one-hour average of:

(i) 0.20 lb/MMBtu heat input while firing natural gas; and

(ii) 0.30 lb/MMBtu heat input while firing fuel oil.

(b) Related emissions. The owner or operator of any unit subject to the emission specifications of subsection (a) of this section shall not allow emissions in excess of the following, except as provided in §117.1325 of this title (relating to Alternative Case Specific Specifications):

(1) for utility boilers or auxiliary steam boilers, carbon monoxide (CO) emissions of 400 ppmv at 3.0% O<sub>2</sub>, dry (or alternatively, 0.30 lb/MMBtu heat input for gas-fired units and 0.31 lb/MMBtu heat input for oil-fired units), based on:

(A) a block one-hour averaging period for units not equipped with a continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS) for CO; and

(B) a rolling 24-hour averaging period for units equipped with CEMS or PEMS for CO;

(2) for any stationary gas turbine with a MW rating greater than or equal to 10 MW, CO emissions in excess of a block one-hour average of 132 ppmv at 15% O<sub>2</sub>, dry basis; and

(3) for units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control, ammonia emissions of 10 ppmv, at 3.0% O<sub>2</sub>, dry, for utility boilers or auxiliary steam boilers and 15% O<sub>2</sub>, dry, for stationary gas turbines (including duct burners used in turbine exhaust ducts), based on:

(A) a block one-hour averaging period for units not equipped with a CEMS or PEMS for ammonia; and

(B) a rolling 24-hour averaging period for units equipped with CEMS or PEMS for ammonia.

(c) Compliance flexibility.

(1) An owner or operator may use §117.9800 of this title (relating to Use of Emission Credits for Compliance) to comply with the NO<sub>x</sub> emission specifications of this section.

(2) Section 117.1325 of this title is not an applicable method of compliance with the NO<sub>x</sub> emission specifications of this section.

(3) An owner or operator may petition the executive director for an alternative to the CO or ammonia specifications of this section in accordance with §117.1325 of this title.

**§117.1325. Alternative Case Specific Specifications.**

(a) Where a person can demonstrate that an affected unit cannot attain the applicable requirements of the carbon monoxide (CO) or ammonia emission specifications of §117.1310(b) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration), the executive director may approve emission specifications different from the CO or ammonia specifications in §117.1310(b) of this title for that unit. The executive director:

(1) shall consider on a case-by-case basis the technological and economic circumstances of the individual unit;

(2) shall determine that such specifications are the result of the lowest emission limitation the unit is capable of meeting after the application of controls to meet the nitrogen oxides emission specifications of §117.1310 of this title, as applicable; and

(3) in determining whether to approve alternative emission specifications, may take into consideration the ability of the plant where the unit is located to meet emission specifications through system-wide averaging at maximum capacity.

(b) Any owner or operator affected by the executive director's decision to deny an alternative case specific emission specification may file a motion to overturn the executive director's decision. The requirements of §50.139 of this title (relating to Motion to Overturn Executive Director's Decision) apply. Executive director approval does not necessarily constitute satisfaction of all federal requirements nor eliminate the need for approval by the United States Environmental Protection Agency in cases where specified criteria for determining equivalency have not been clearly identified in applicable sections of this division (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources).

**§117.1335. Initial Demonstration of Compliance.**

(a) The owner or operator of all units subject to the emission specifications of this division shall test the units as follows.

(1) The units must be tested for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and oxygen (O<sub>2</sub>) emissions.

(2) Units that inject urea or ammonia into the exhaust stream for NO<sub>x</sub> control must be tested for ammonia emissions.

(3) Testing must be performed in accordance with the schedules specified in §117.9130 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources).

(b) The tests required by subsection (a) of this section must be used for determination of initial compliance with the emission specifications of this division. Test results must be reported in the units of the applicable emission specifications and averaging periods. If compliance testing is based on 40 Code of Federal Regulations Part 60, Appendix A reference methods, the report must contain the information specified in §117.8010 of this title (relating to Compliance Stack Test Reports).

(c) Continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) required by §117.1340 of this title (relating to Continuous Demonstration of Compliance) must be installed and operational before conducting testing under subsection (a) of this section. Verification of operational status must, at a minimum, include completion of the initial monitor certification and the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(d) Initial compliance with the emission specifications of this division for units operating with CEMS or PEMS in accordance with §117.1340 of this title must be demonstrated after monitor certification testing using the NO<sub>x</sub> CEMS or PEMS as follows.

(1) To comply with the NO<sub>x</sub> emission specification in pounds per million British thermal units (lb/MMBtu) on a rolling 30-day average, NO<sub>x</sub> emissions from a unit are monitored for 30 consecutive unit operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>x</sub> emission specification. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) To comply with the NO<sub>x</sub> emission specification in lb/MMBtu on a rolling 24-hour average, NO<sub>x</sub> emissions from a unit are monitored for 24 consecutive unit operating hours and the 24-hour average emission rate is used to determine compliance with the NO<sub>x</sub> emission specification. The 24-hour average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 24-hour test period. Compliance with the NO<sub>x</sub> emission specification for fuel oil firing must be determined based on the first 24 consecutive operating hours a unit fires fuel oil.

(3) To comply with the NO<sub>x</sub> emission specification in pounds per hour or parts per million by volume (ppmv) at 15% O<sub>2</sub> dry basis, on a block one-hour average, any one-hour period while operating at the maximum rated capacity, or as near thereto as

practicable, after CEMS or PEMS certification testing required in §117.1340 of this title is used to determine compliance with the NO<sub>x</sub> emission specification.

(4) To comply with the NO<sub>x</sub> emission specification in lb/MMBtu on a block one-hour average, any one-hour period while operating at the maximum rated capacity, or as near thereto as practicable, after CEMS or PEMS certification testing required in §117.1340 of this title is used to determine compliance with the NO<sub>x</sub> emission specification.

(5) To comply with the NO<sub>x</sub> emission specification in pounds per megawatt-hour output on an annual average basis, NO<sub>x</sub> emissions from the unit are monitored in accordance with §117.1340(a) and (k) of this title. The annual average is calculated as the average of all hourly emissions data recorded by the monitoring system. The averaging period for demonstrating initial compliance with the emission specification in §117.1310(a)(1)(C) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) is from March 1, 2009, through February 28, 2010.

(6) To comply with the NO<sub>x</sub> emission specification in lb/MMBtu on a rolling 168-hour average, NO<sub>x</sub> emissions from all units in the system are monitored for 168 consecutive unit operating hours and the 168-hour average emission rate is used to determine compliance with the NO<sub>x</sub> emission specification. The 168-hour average emission rate is calculated using the equation in §117.1310(a)(1)(D) of this title by calculating the

system-wide heat input weighted average for each hour and then averaging the hourly data during the 168-hour test period.

(7) To comply with the CO emission specification in ppmv on a rolling 24-hour average, CO emissions from a unit are monitored for 24 consecutive unit operating hours and the rolling 24-hour average emission rate is used to determine compliance with the CO emission specification. The rolling 24-hour average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 24-hour test period.

**§117.1340. Continuous Demonstration of Compliance.**

(a) Nitrogen oxides (NO<sub>x</sub>) monitoring. The owner or operator of each unit subject to the emission specifications of this division, shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS), predictive emissions monitoring system (PEMS), or other system specified in this section to measure NO<sub>x</sub> on an individual basis. Each NO<sub>x</sub> monitor (CEMS or PEMS) is subject to the relative accuracy test audit relative accuracy requirements of 40 Code of Federal Regulations (CFR) Part 75, Appendix B, Figure 2, except the concentration options (parts per million by volume (ppmv) and pound per million British thermal units (lb/MMBtu)) do not apply. Each NO<sub>x</sub> monitor must meet either the relative accuracy percent requirement of 40 CFR Part 75, Appendix B, Figure 2,

or an alternative relative accuracy requirement of  $\pm 2.0$  ppmv from the reference method mean value.

(b) Carbon monoxide (CO) monitoring. The owner or operator shall monitor CO exhaust emissions from each unit subject to the emission specifications of this division using one or more of the methods specified in §117.8120 of this title (relating to Carbon Monoxide (CO) Monitoring).

(c) Ammonia monitoring requirements. The owner or operator of units that are subject to the ammonia emission specification of §117.1310(b)(3) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall comply with the ammonia monitoring requirements of §117.8130 of this title (relating to Ammonia Monitoring).

(d) CEMS requirements. The owner or operator of any CEMS used to meet a pollutant monitoring requirement of this section shall comply with the requirements of §117.8110(a) of this title (relating to Emission Monitoring System Requirements for Utility Electric Generation Sources).

(e) Acid rain peaking units. The owner or operator of each peaking unit as defined in 40 CFR §72.2, may:

(1) monitor operating parameters for each unit in accordance with 40 CFR Part 75, Appendix E, §1.1 or §1.2 and calculate NO<sub>x</sub> emission rates based on those procedures; or

(2) use CEMS or PEMS in accordance with this section to monitor NO<sub>x</sub> emission rates.

(f) Auxiliary steam boilers. The owner or operator of each auxiliary steam boiler shall comply with the following to monitor NO<sub>x</sub> emission rates:

(1) install, calibrate, maintain, and operate a CEMS in accordance with this section; or

(2) comply with the appropriate (considering boiler maximum rated capacity and annual heat input) industrial boiler monitoring requirements of §117.440 of this title (relating to Continuous Demonstration of Compliance).

(g) PEMS requirements. The owner or operator of any PEMS used to meet a pollutant monitoring requirement of this section shall comply with the following. The required PEMS and fuel flow meters must be used to demonstrate continuous compliance with the emission specifications of this division.

(1) The PEMS must predict the pollutant emissions in the units of the applicable emission limitations of this division.

(2) The PEMS must meet the requirements of §117.8110(b) of this title.

(h) Stationary gas turbine monitoring. The owner or operator of each stationary gas turbine subject to the emission specifications of §117.1310 of this title, instead of monitoring emissions in accordance with the monitoring requirements of 40 CFR Part 75, may comply with the following monitoring requirements:

(1) for stationary gas turbines rated less than 30 megawatts (MW) or peaking gas turbines (as defined in §117.10 of this title (relating to Definitions)) that use steam or water injection to comply with the emission specifications of §117.1310(a)(3) of this title:

(A) install, calibrate, maintain and operate a CEMS or PEMS in compliance with this section; or

(B) install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the average hourly fuel and steam or water consumption. The system must be accurate to within  $\pm 5.0\%$ . The steam-to-fuel or water-to-fuel ratio monitoring data must be used for demonstrating continuous compliance with the applicable emission specification of §117.1310 of this title; and

(2) for all other stationary gas turbines subject to the emission specifications of §117.1310 of this title, install, calibrate, maintain, and operate a CEMS or PEMS in compliance with this section.

(i) Totalizing fuel flow meters. The owner or operator of units listed in this subsection shall install, calibrate, maintain, and operate totalizing fuel flow meters to individually and continuously measure the gas and liquid fuel usage. A computer that collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer. In lieu of installing a totalizing fuel flow meter on a unit, an owner or operator may opt to assume fuel consumption at maximum design fuel flow rates during hours of the unit's operation. The units are:

(1) any unit subject to the emission specifications of §117.1310 of this title;

(2) any stationary gas turbine with an MW rating greater than or equal to 1.0 MW operated more than 850 hours per year; and

(3) any unit claimed exempt from the emission specifications of this division using the low annual capacity factor exemption of §117.1303(a)(2) of this title (relating to Exemptions).

(j) Run time meters. The owner or operator of any stationary gas turbine using the exemption of §117.1303(a)(3) of this title shall record the operating time with an elapsed run time meter.

(k) Monitoring for output-based NO<sub>x</sub> emission specification. The owner or operator of any unit that complies with the optional output-based NO<sub>x</sub> emission specification in §117.1310(a)(1)(C) of this title, shall comply with the following:

(1) install, calibrate, maintain, and operate a system to continuously monitor, at least once every 15 minutes, and record the gross energy production of the unit in megawatt-hours;

(2) for each hour of operation, determine the total mass emission of NO<sub>x</sub>, in pounds, from the unit using the NO<sub>x</sub> monitoring requirements of subsection (a) of this section and the fuel monitoring requirements of subsection (i) of this section; and

(3) for each hour of operation, calculate and record the NO<sub>x</sub> emissions in pounds per megawatt-hour using the monitoring specified in paragraphs (1) and (2) of this subsection.

(l) Loss of exemption. The owner or operator of any unit claimed exempt from the emission specifications of this division using the exemptions in §117.1303(a)(2) or (3) of

this title, shall notify the executive director within seven days if the applicable limit is exceeded.

(1) If the limit is exceeded, the exemption from the emission specifications of this division is permanently withdrawn.

(2) Within 90 days after loss of the exemption, the owner or operator shall submit a compliance plan detailing a plan to meet the applicable compliance limit as soon as possible, but no later than 24 months after exceeding the limit. The plan must include a schedule of increments of progress for the installation of the required control equipment.

(3) The schedule is subject to the review and approval of the executive director.

(m) Data used for compliance. After the initial demonstration of compliance required by §117.1335 of this title (relating to Initial Demonstration of Compliance), the methods required in this section must be used to determine compliance with the emission specifications of §117.1310 of this title. Compliance with the emission specifications may also be determined at the discretion of the executive director using any commission compliance method.

**§117.1345. Notification, Recordkeeping, and Reporting Requirements.**

(a) Startup and shutdown records. For units subject to the startup and/or shutdown provisions of §101.222 of this title (relating to Demonstrations), hourly records must be made of startup and/or shutdown events and maintained for a period of at least two years. Records must be available for inspection by the executive director, United States Environmental Protection Agency, and any local air pollution control agency having jurisdiction upon request. These records must include, but are not limited to: type of fuel burned; quantity of each type fuel burned; gross and net energy production in megawatt-hours (MW-hr); and the date, time, and duration of the event.

(b) Notification. The owner or operator of a unit subject to the emission specifications of this division (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources) shall submit notification to the appropriate regional office and any local air pollution control agency having jurisdiction as follows:

(1) written notification of the date of any testing conducted under §117.1335 of this title (relating to Initial Demonstration of Compliance) at least 15 days prior to such date; and

(2) written notification of the date of any continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS) performance evaluation

conducted under §117.1340 of this title (relating to Continuous Demonstration of Compliance) at least 15 days prior to such date.

(c) Reporting of test results. The owner or operator of an affected unit shall furnish the Office of Compliance and Enforcement, the appropriate regional office, and any local air pollution control agency having jurisdiction a copy of any testing conducted under §117.1335 of this title or any CEMS or PEMS performance evaluation conducted under §117.1340 of this title:

(1) within 60 days after completion of such testing or evaluation; and

(2) not later than the appropriate compliance schedules specified in §117.9130 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources).

(d) Semiannual reports. The owner or operator of a unit required to install a CEMS, PEMS, or steam-to-fuel or water-to-fuel ratio monitoring system under §117.1340 of this title shall report in writing to the executive director on a semiannual basis any exceedance of the applicable emission limitations in this division and the monitoring system performance. All reports must be postmarked or received by the 30th day following the end of each calendar semiannual period. Written reports must include the following information:

(1) the magnitude of excess emissions computed in accordance with 40 Code of Federal Regulations (CFR) §60.13(h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the unit operating time during the reporting period. For stationary gas turbines using steam-to-fuel or water-to-fuel ratio monitoring to demonstrate compliance in accordance with §117.1340 of this title, excess emissions are computed as each one-hour period that the hourly steam-to-fuel or water-to-fuel ratio is less than the ratio determined to result in compliance during the initial demonstration of compliance test required by §117.1335 of this title;

(2) specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected unit, the nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted;

(3) the date and time identifying each period when the continuous monitoring system was inoperative, except for zero and span checks and the nature of the system repairs or adjustments;

(4) when no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report; and

(5) if the total duration of excess emissions for the reporting period is less than 1.0% of the total unit operating time for the reporting period and the CEMS, PEMS, or steam-to-fuel or water-to-fuel ratio monitoring system downtime for the reporting period is less than 5.0% of the total unit operating time for the reporting period, only a summary report form (as outlined in the latest edition of the commission's *Guidance for Preparation of Summary, Excess Emission, and Continuous Monitoring System Reports*) must be submitted, unless otherwise requested by the executive director. If the total duration of excess emissions for the reporting period is greater than or equal to 1.0% of the total unit operating time for the reporting period or the CEMS, PEMS, or steam-to-fuel or water-to-fuel ratio monitoring system downtime for the reporting period is greater than or equal to 5.0% of the total unit operating time for the reporting period, a summary report and an excess emission report must both be submitted.

(e) Recordkeeping. The owner or operator of a unit subject to the requirements of this division shall maintain records of the data specified in this subsection. Records must be kept for a period of at least five years and made available for inspection by the executive director, United States Environmental Protection Agency, or local air pollution control agencies having jurisdiction upon request. Operating records for each unit must be recorded and maintained at a frequency equal to the applicable emission specification averaging period, or for units claimed exempt from the emission specifications based on low annual capacity factor, monthly. Records must include:

(1) emission rates in units of the applicable standards;

(2) gross energy production in MW-hr (not applicable to auxiliary steam boilers), except as specified in paragraph (8) of this subsection;

(3) quantity and type of each fuel burned;

(4) the injection rate of reactant chemicals (if applicable);

(5) emission monitoring data, in accordance with §117.1340 of this title, including:

(A) the date, time, and duration of any malfunction in the operation of the monitoring system, except for zero and span checks, if applicable, and a description of system repairs and adjustments undertaken during each period;

(B) the results of initial certification testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS, PEMS, or operating parameter monitoring systems; and

(C) actual emissions or operating parameter measurements, as applicable;

(6) the results of performance testing, including initial demonstration of compliance testing conducted in accordance with §117.1335 of this title;

(7) records of hours of operation;

(8) for any unit that the owner or operator elects to comply with the output-based emission specification in §117.1310(a)(1)(C) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration):

(A) hourly records of the gross energy production in MW-hr;

(B) records of hourly and annual average nitrogen oxides (NO<sub>x</sub>) emissions in pounds per megawatt-hour (lb/MW-hr); and

(C) the averaging period for the annual average NO<sub>x</sub> emissions in lb/MW-hr, for demonstrating continuous compliance is from January 1 through December 31 of each calendar year, beginning on January 1, 2010; and

(9) for any unit that the owner or operator elects to comply with the system-wide heat input weighted average emission specification in §117.1310(a)(1)(D) of this title:

(A) hourly records of average NO<sub>x</sub> emissions in pounds per million British thermal units (lb/MMBtu) for each utility boiler in the system;

(B) hourly records of average heat input in million British thermal units per hour (MMBtu/hr) for each utility boiler in the system;

(C) hourly records of system-wide heat input weighted average NO<sub>x</sub> emissions in lb/MMBtu; and

(D) hourly records of the rolling 168-hour average of the system-wide heat input weighted average NO<sub>x</sub> emissions in lb/MMBtu.

**§117.1350. Initial Control Plan Procedures.**

(a) The owner or operator of any unit at a major source of nitrogen oxides (NO<sub>x</sub>) in the Dallas-Fort Worth eight-hour ozone nonattainment area that is subject to §117.1310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall submit an initial control plan. The control plan must include:

(1) a list of all combustion units at the account that are listed in §117.1310 of this title. The list must include for each unit:

(A) the maximum rated capacity;

(B) anticipated annual capacity factor;

(C) estimated or measured NO<sub>x</sub> emission data in the units associated with the category of equipment from §117.1310 of this title;

(D) the method of determination for the NO<sub>x</sub> emission data required by subparagraph (C) of this paragraph;

(E) the facility identification number and emission point number as submitted to the Emissions Assessment Section of the commission; and

(F) the emission point number as listed on the Maximum Allowable Emissions Rate Table of any applicable commission permit;

(2) identification of all units with a claimed exemption from the emission specifications of §117.1310 of this title and the rule basis for the claimed exemption;

(3) a list of units to be controlled and the type of control to be applied for all such units, including an anticipated construction schedule;

(4) for units required to install totalizing fuel flow meters in accordance with §117.1340 of this title (relating to Continuous Demonstration of Compliance), indication of whether the devices are currently in operation, and if so, whether they have been installed as a result of the requirements of this chapter; and

(5) for units required to install continuous emissions monitoring systems or predictive emissions monitoring systems in accordance with §117.1340 of this title, indication of whether the devices are currently in operation, and if so, whether they have been installed as a result of the requirements of this chapter.

(b) The initial control plan must be submitted to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air by the applicable date specified for initial control plans in §117.9130 of this title (relating to Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources).

**§117.1354. Final Control Plan Procedures for Attainment Demonstration  
Emission Specifications.**

(a) The owner or operator of utility boilers listed in §117.1300 of this title (relating to Applicability) at a major source of nitrogen oxides (NO<sub>x</sub>) shall submit to the Office of Compliance and Enforcement, the appropriate regional office, and the Office of Air, a final control report to show compliance with the requirements of §117.1310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration). The report must include:

(1) the methods of NO<sub>x</sub> control for each utility boiler;

(2) the emissions measured by testing required in §117.1335 of this title (relating to Initial Demonstration of Compliance);

(3) the submittal date, and whether sent to the central or the regional office (or both), of any compliance stack test report or monitor certification report required by §117.1335 of this title that is not being submitted concurrently with the final compliance report; and

(4) the specific rule citation for any utility boiler with a claimed exemption from the emission specification of §117.1310 of this title.

(b) The report must be submitted by the applicable date specified for final control plans in §117.9130 of this title (relating to Compliance Schedule Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources).

**SUBCHAPTER G: GENERAL MONITORING AND TESTING REQUIREMENTS**

**DIVISION 1: COMPLIANCE STACK TESTING AND REPORT REQUIREMENTS**

**§117.8000**

**Statutory Authority**

The amended section is adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended section is also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The amended section is also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions.

The amended section is also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended section implements THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.8000. Stack Testing Requirements.**

(a) When required by this chapter, the owner or operator of a unit subject to this chapter shall conduct testing according to the requirements of this section.

(b) The unit must be operated at the maximum rated capacity, or as near as practicable. Compliance must be determined by the average of three one-hour emission test runs. Shorter test times may be used if approved by the executive director.

(c) Testing must be performed using the following test methods:

(1) Test Method 7E or 20 (40 Code of Federal Regulations (CFR), Part 60, Appendix A) for nitrogen oxides (NO<sub>x</sub>);

(2) Test Method 10, 10A, or 10B (40 CFR Part 60, Appendix A) for carbon monoxide (CO);

(3) Test Method 3A or 20 (40 CFR Part 60, Appendix A) for oxygen (O<sub>2</sub>);

(4) for units that inject ammonia or urea to control NO<sub>x</sub> emissions, the Phenol-Nitroprusside Method, the Indophenol Method, or the United States Environmental Protection Agency Conditional Test Method 27 for ammonia;

(5) Test Method 2 (40 CFR Part 60, Appendix A) for exhaust gas flow and following the measurement site criteria of Test Method 1, §11.1 (40 CFR Part 60, Appendix A), or Test Method 19 (40 CFR Part 60, Appendix A) for exhaust gas flow in conjunction with the measurement site criteria of Performance Specification 2, §8.1.3 (40 CFR Part 60, Appendix B); or

(6) American Society for Testing and Materials (ASTM) Method D1945-91 or ASTM Method D3588-93 for fuel composition; ASTM Method D1826-88 or ASTM Method D3588-91 for calorific value; or alternate methods as approved by the executive director and the United States Environmental Protection Agency.

(d) United States Environmental Protection Agency-approved alternate test methods or minor modifications to the test methods specified in subsection (c) of this section may be

used, as approved by the executive director, as long as the minor modifications meet the following conditions:

(1) the change does not affect the stringency of the applicable emission specification;

(2) the change affects only a single source or facility application.

(e) An owner or operator that chooses to install or relocate a boiler or process heater temporarily at an account for less than 60 consecutive calendar days may substitute the following in lieu of the requirements of subsections (b) - (d) of this section for stack testing required by this chapter. For the purposes of this subsection, the term "relocate" means to newly install at an account, as defined in §101.1 of this title (relating to Definitions), a boiler or process heater from anywhere outside of that account.

(1) The owner or operator may use the results of previous testing conducted on the same boiler or process heater conducted according to subsections (b) - (d) of this section or a manufacturer's guarantee of performance. If previous testing is used, the owner or operator of the site temporarily installing the boiler or process heater shall maintain a record of the previous test report as specified by the recordkeeping requirements under this chapter applicable to the site.

(2) The owner or operator shall physically remove the boiler or process heater from the account no later than 60 consecutive calendar days after the unit was installed at the account or comply with the testing requirements as specified in subsections (b) - (d) of this section.

(3) Extensions to the 60 consecutive calendar days limitation of this subsection will not be provided.

## **SUBCHAPTER H: ADMINISTRATIVE PROVISIONS**

### **DIVISION 1: COMPLIANCE SCHEDULES**

#### **§117.9010, §117.9110**

#### **Statutory Authority**

The repealed sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The repealed sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The repealed sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions.

The repealed sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The repealed sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.9010. Compliance Schedule for Dallas-Fort Worth Ozone Nonattainment Area Major Sources.**

**§117.9110. Compliance Schedule for Dallas-Fort Worth Ozone Nonattainment Area Utility Electric Generation Sources.**

## **SUBCHAPTER H: ADMINISTRATIVE PROVISIONS**

### **DIVISION 1: COMPLIANCE SCHEDULES**

#### **§117.9030, §117.9130**

#### **Statutory Authority**

The amended sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The amended sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions.

The amended sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.9030. Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources.**

(a) Reasonably available control technology emission specifications.

(1) The owner or operator of any stationary source of nitrogen oxides (NO<sub>x</sub>) in the Dallas-Fort Worth eight-hour ozone nonattainment area that is a major source of NO<sub>x</sub> and is subject to §117.405(a) or (b) of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) shall comply with the requirements of Subchapter B, Division 4 of this chapter (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources) as follows:

(A) submit the initial control plan required by §117.450 of this title (relating to Initial Control Plan Procedures) no later than June 1, 2016; and

(B) for units subject to the emission specifications of §117.405(a) or (b) of this title, comply with all other requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than January 1, 2017.

(2) The owner or operator of any stationary source of NO<sub>x</sub> that becomes subject to the requirements of §117.405 of this title on or after the applicable compliance date specified in paragraph (1) of this subsection, shall comply with the requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than 60 days after becoming subject.

(3) Upon the date the commission publishes notice in the *Texas Register* that the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective, the owner or operator of a unit located at a major stationary source of NO<sub>x</sub> located in Wise County is not required to comply with the requirements of Subchapter B, Division 4 of this chapter.

(b) Eight-hour ozone attainment demonstration emission specifications.

(1) The owner or operator of any stationary source of NO<sub>x</sub> in the Dallas-Fort Worth eight-hour ozone nonattainment area that is a major source of NO<sub>x</sub> and is subject to §117.410(a) of this title (relating to Emission Specifications for Eight-Hour Attainment

Demonstration) shall comply with the requirements of Subchapter B, Division 4 of this chapter as follows:

(A) submit the initial control plan required by §117.450 of this title no later than June 1, 2008; and

(B) for units subject to the emission specifications of §117.410(a) of this title, comply with all other requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than:

(i) March 1, 2009, for units subject to §117.410(a) (1), (2), (4), (5), (6), (7)(A), (8), (10), and (14) of this title;

(ii) March 1, 2010, for units subject to §117.410(a) (3), (7)(B), (9), (11), (12), and (13) of this title;

(C) for diesel and dual-fuel engines, comply with the restriction on hours of operation for maintenance or testing in §117.410(f) of this title, and associated recordkeeping in §117.445(f)(9) of this title (relating to Notification, Recordkeeping, and Reporting Requirements), as soon as practicable, but no later than March 1, 2009; and

(D) for any stationary gas turbine or stationary internal combustion engine claimed exempt using the exemption of §117.403(a)(7)(D), (8), or (9) of this title (relating to Exemptions), comply with the run time meter requirements of §117.440(i) of this title (relating to Continuous Demonstration of Compliance), and recordkeeping requirements of §117.445(f)(4) of this title, as soon as practicable, but no later than March 1, 2009.

(2) The owner or operator of any stationary source of NO<sub>x</sub> that becomes subject to the requirements of Subchapter B, Division 4 of this chapter on or after the applicable compliance date specified in paragraph (1) of this subsection, shall comply with the requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than 60 days after becoming subject.

**§117.9130. Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources.**

(a) Except as specified in subsection (b) of this section, the owner or operator of each electric utility in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County shall comply with the requirements of Subchapter C, Division 4 of this chapter (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources) as soon as practicable, but no later than as follows:

(1) submit the initial control plan required by §117.1350 of this title (relating to Initial Control Plan Procedures) no later than June 1, 2008; and

(2) comply with all other requirements of Subchapter C, Division 4 of this chapter as soon as practicable, but no later than March 1, 2009.

(b) The owner or operator of each auxiliary steam boiler or stationary gas turbine placed into service after November 15, 1992 in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County shall comply with the requirements of Subchapter C, Division 4 of this chapter as soon as practicable, but no later than as follows:

(1) submit the initial control plan required by §117.1350 of this title no later than June 1, 2016; and

(2) comply with all other requirements of Subchapter C, Division 4 of this chapter as soon as practicable, but no later than January 1, 2017.

(c) The owner or operator of each electric utility in Wise County shall comply with the requirements of Subchapter C, Division 4 of this chapter as soon as practicable, but no later than as follows:

(1) submit the initial control plan required by §117.1350 of this title no later than June 1, 2016; and

(2) comply with all other requirements of Subchapter C, Division 4 of this chapter as soon as practicable, but no later than January 1, 2017.

(d) The owner or operator of each electric utility in the Dallas-Fort Worth eight-hour ozone nonattainment area of nitrogen oxides that becomes subject to the requirements of Subchapter C, Division 4 of this chapter on or after the applicable compliance date specified in subsection (a), (b), or (c) of this section, shall comply with the requirements of Subchapter C, Division 4 of this chapter as soon as practicable, but no later than 60 days after becoming subject.

(e) Upon the date the commission publishes notice in the *Texas Register* that the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective, the owner or operator of an electric utility located in Wise County is not required to comply with the requirements of Subchapter C, Division 4 of this chapter.

## **SUBCHAPTER H: ADMINISTRATIVE PROVISIONS**

### **DIVISION 2: COMPLIANCE FLEXIBILITY**

#### **§117.9800, §117.9810**

#### **Statutory Authority**

The amended sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that 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, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The amended sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions.

The amended sections are also adopted under Federal Clean Air Act (FCAA), 42 United States Code (USC), §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended sections implement THSC, §§382.002, 382.011, 382.012, 382.016, and 382.017; and FCAA, 42 USC, §§7401 *et seq.*

**§117.9800. Use of Emission Credits for Compliance.**

(a) An owner or operator of a unit not subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program) may meet emission control requirements of the sections specified in paragraphs (1) - (8) of this subsection, in whole or in part, by obtaining an emission reduction credit (ERC), mobile emission reduction credit (MERC), discrete emission reduction credit (DERC), or mobile discrete emission reduction credit (MDERC) in accordance with Chapter 101, Subchapter H, Division 1 or 4 of this title (relating to Emission Credit Banking and Trading; and Discrete Emission Credit Banking and Trading), unless there are federal or state regulations or permits under the same commission account number that contain a condition or conditions precluding such use:

(1) §§117.105, 117.405, or 117.1005 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT));

(2) §117.110 or §117.1010 of this title (relating to Emission Specifications for Attainment Demonstration);

(3) §117.1015 of this title (relating to Alternative System-Wide Emission Specifications);

(4) §117.115 of this title (relating to Alternative Plant-Wide Emission Specifications);

(5) §§117.123, 117.423, or 117.3120 of this title (relating to Source Cap);

(6) §§117.2010, 117.3010, or 117.3110 of this title (relating to Emission Specifications);

(7) §§117.410, 117.1310, 117.2110, or 117.3310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration); or

(8) §117.3123 of this title (relating to Dallas-Fort Worth Eight-Hour Ozone Attainment Demonstration Control Requirements).

(b) An owner or operator of a unit subject to §§117.320, 117.1020, 117.1220, or 117.3020 of this title (relating to System Cap) may meet the emission control requirements of these sections in whole or in part, by complying with the requirements of Chapter 101, Subchapter H, Division 1 or 4 of this title, by obtaining an ERC, MERC, DERC, or MDERC, unless there are federal or state regulations or permits under the same commission account number that contain a condition or conditions precluding such use.

(c) For the purposes of this section, the term "reduction credit (RC)" refers to an ERC, MERC, DERC, or MDERC, whichever is applicable.

(d) Any lower nitrogen oxides (NO<sub>x</sub>) emission specification established under this chapter for the unit or units using RCs requires the user of the RCs to obtain additional RCs in accordance with Chapter 101, Subchapter H, Division 1 or 4 of this title and/or otherwise reduce emissions prior to the effective date of such rule change. For units using RCs in accordance with this section that are subject to new, more stringent rule limitations, the owner or operator using the RCs shall submit a revised final control plan to the executive director in accordance with §§117.156, 117.356, 117.456, 117.1056, 117.1256, and 117.1356 of this title (relating to Revision of Final Control Plan) to revise the basis for compliance with the emission specifications of this chapter. The owner or operator using the RCs shall submit the revised final control plan as soon as practicable, but no later than 90 days prior

to the effective date of the new, more stringent rule. The owner or operator of the unit(s) currently using RCs shall calculate the necessary emission reductions per unit as follows.

Figure: 30 TAC §117.9800(d) (No change to the figure as it exists in TAC)

**§117.9810. Use of Emission Reductions Generated from the Texas Emissions Reduction Plan (TERP).**

(a) An owner or operator of a unit located in the Dallas-Fort Worth eight-hour ozone nonattainment area or in the Houston-Galveston-Brazoria ozone nonattainment area that is not subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program) may meet emission control requirements of the sections specified in paragraphs (1) and (2) of this subsection, by obtaining emission reductions generated from the TERP as specified in subsection (b) of this section:

(1) §117.405 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT));

(2) §117.410 or §117.1310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration).

(b) An owner or operator may obtain emission reductions generated from TERP, as provided in subsection (a) of this section, if:

(1) the owner or operator of the site as defined in §122.10 of this title (relating to General Definitions) contributes to the TERP fund, \$75,000 per ton of nitrogen oxides emissions used, not to exceed 25 tons per year or 0.5 tons per day on a site-wide basis;

(2) the owner or operator of the site demonstrates to the executive director that the site will be in full compliance with the applicable emission reduction requirements of this chapter no later than the fifth anniversary of the date that the emission reductions would otherwise be required;

(3) emissions from the site are reduced by at least 80% of the required reductions;

(4) the reductions accomplished under the TERP have not been previously used to meet reduction requirements under a state implementation plan attainment demonstration;

(5) the reductions accomplished under the TERP are used in the same nonattainment area that they are generated; and

(6) the executive director approves a petition submitted by the owner or operator of the site that demonstrates that it is technically infeasible to comply with applicable emission reduction requirements of this chapter above 80% of the required reductions. When considering technical infeasibility the executive director may consider, but will not be limited to:

- (A) current technology;
- (B) adaptability of technology to a particular source;
- (C) age and projected useful life of a source; and
- (D) cost benefits at the time of application.

(c) The emissions reductions funded under the TERP, and used to offset commission requirements, must be used to benefit the community where the site using the emissions reductions is located. If there are no eligible emissions reduction projects within the community, the commission may authorize projects in an adjacent community. For purposes of this section, a community means a Justice of the Peace precinct.