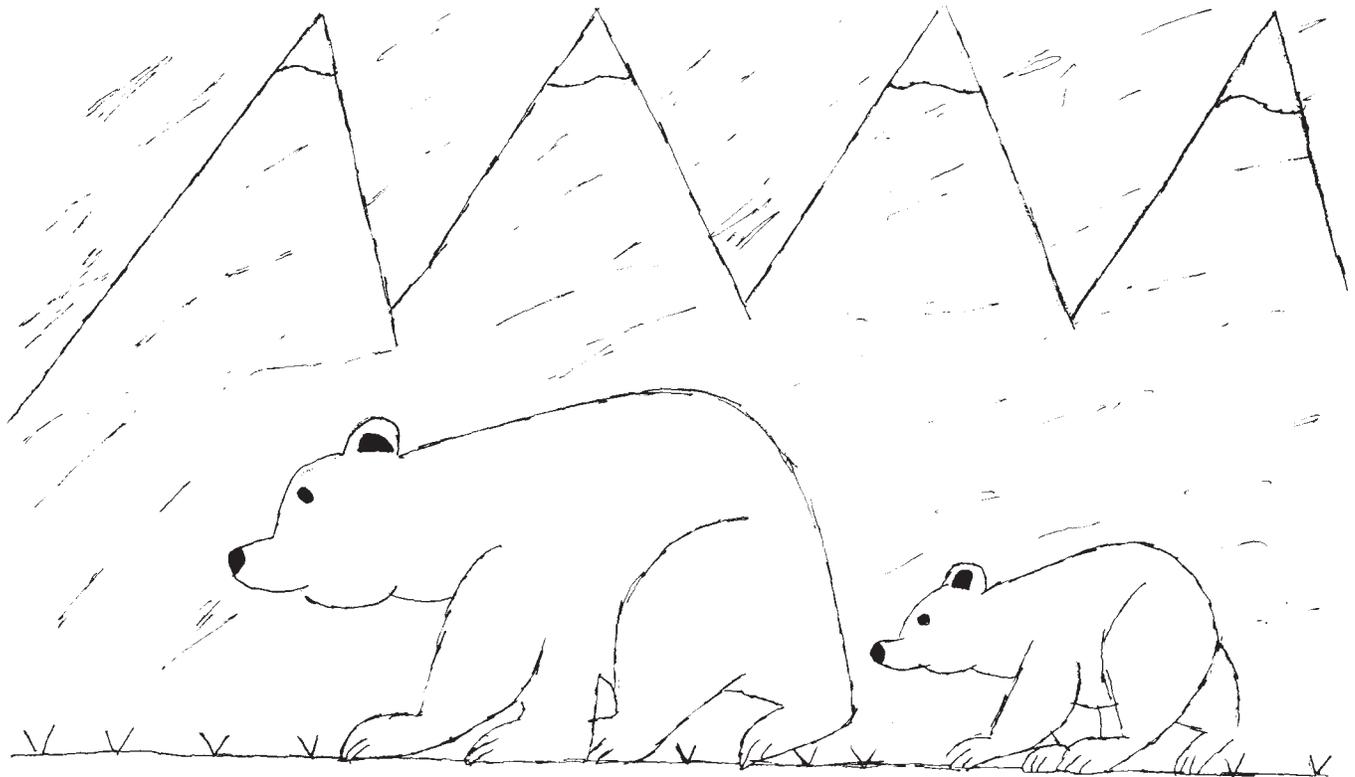

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P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. All comments should reference Rule Log Number 99055J-114-AI. Comments must be received by 5:00 p.m., February 1, 2000. For further information, please contact Alan Henderson at (512) 239-1510 or Brian Foster at (512) 239-1930.

STATUTORY AUTHORITY

The new sections are proposed under the Texas Health and Safety Code, TCAA, §382.011, which provides the commission the authority to control the quality of the state's air; §382.012, which provides the commission the authority to prepare and develop a general, comprehensive plan for the control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA; §382.019, which provides the commission the authority to adopt rules to control and reduce emissions from engines used to propel land vehicles; and §382.039, which provides the commission the authority to develop and implement transportation programs and other measures necessary to demonstrate attainment and protect the public from exposure to hazardous air contaminants from motor vehicles.

The new sections implement TCAA, §382.002, relating to Policy and Purpose; §382.011, relating to General Powers and Duties; §382.012, relating to State Air Control Plan; §382.019, relating to Methods Used to Control and Reduce Emissions from Land Vehicles; and §382.039, relating to Attainment Program.

§114.432. Control Requirements.

No person shall start or operate any non-road diesel construction equipment, of 50-horsepower and above, between the hours of 6:00 a.m. to 10:00 a.m., during the time period between June 1 through October 31, in the counties listed in §114.439 of this title (relating to Affected Counties and Compliance Dates).

§114.436. Recordkeeping Requirements.

(a) Each company or independent equipment operator that operates non-road equipment listed in §114.432 of this title (relating to Control Requirements) in those counties listed in §114.439 of this title (relating to Affected Counties and Compliance Dates) is subject to requirements of this section.

(b) Each company or independent equipment operator shall provide to the executive director any records required to be maintained by the company or independent equipment operator in accordance with this section within five days of a written request from the executive director, if the request is received before expiration of the period during which the records are required to be maintained. Whenever a company or independent equipment operator fails to provide records regarding the operation of non-road equipment in accordance with the requirements of this section, the company or independent equipment operator shall be presumed to be in violation of the conditions specified in §114.432 of this title.

(c) Each company or independent equipment operator shall maintain daily operating records for a minimum of two years. The records as a minimum must contain:

- (1) date(s) of operation;
- (2) start and end times of daily operation;
- (3) type(s) of equipment being used; and
- (4) name(s) of the equipment operator(s).

§114.437. Exemptions.

The following uses are exempt from §114.432 and §114.436 of this title (relating to Control Requirements; and Recordkeeping

Requirements) in the counties listed in §114.439 of this title (relating to Affected Counties and Compliance Dates):

(1) equipment used exclusively for situations involving emergency operations provided the operation is required for an emergency; and

(2) equipment used for mixing, transporting, pouring, or processing of wet concrete provided such equipment is actually processing wet concrete.

§114.439. Affected Counties and Compliance Dates.

Effective June 1, 2001, affected persons in the following counties shall be in compliance with §§114.432, 114.436, and 114.437 of this title (relating to Control Requirements; Recordkeeping Requirements; and Exemptions). These include Collin, Dallas, Denton, and Tarrant Counties in the Dallas/Fort Worth (DFW) ozone nonattainment area; as well as Ellis, Henderson, Hood, Hunt, Johnson, Kaufman, Parker, and Rockwall Counties which comprise the remaining eight counties of the DFW consolidated metropolitan statistical area.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State, on December 20, 1999.

TRD-9908821

Margaret Hoffman

Director, Environmental Law Division

Texas Natural Resource Conservation Commission

Proposed date of adoption: April 19, 2000

For further information, please call: (512) 239-0348



Chapter 117. CONTROL OF AIR POLLUTION FROM NITROGEN COMPOUNDS

The Texas Natural Resource Conservation Commission (TNRCC or commission) proposes amendments to §117.10, concerning Definitions. The commission also proposes new §117.131, concerning Applicability; §117.133, concerning Exemptions; §117.134, concerning Gas-Fired Steam Generation; §117.135, concerning Emission Specifications; §117.138, concerning System Cap; §117.141, concerning Initial Demonstration of Compliance; §117.143, concerning Continuous Demonstration of Compliance; §117.145, concerning Final Control Plan Procedures; §117.147, concerning Revision of Final Control Plan; §117.149, concerning Notification, Recordkeeping, and Reporting Requirements; §117.260, concerning Cement Kiln Definitions; §117.261, concerning Applicability; §117.265, concerning Emission Specifications; §117.273, concerning Continuous Demonstration of Compliance; §117.279, concerning Notification, Recordkeeping, and Reporting Requirements; §117.283, concerning Source Cap; §117.512, concerning Compliance Schedule for Utility Electric Generation in East and Central Texas; and §117.524, concerning Compliance Schedule for Cement Kilns.

The commission proposes these revisions to Chapter 117, concerning Control of Air Pollution from Nitrogen Compounds, and to the State Implementation Plan (SIP) in order to reduce nitrogen oxide (NO_x) emissions from cement kilns and electric utility power boilers and stationary gas turbines located in ozone attainment counties in east and central Texas. The 34 affected ozone attainment counties in which cement kilns or electric util-

ity power boilers and stationary gas turbines are located Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Comal, Ellis, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Hayes, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Parker, Red River, Robertson, Rusk, Titus, Travis, Victoria, and Wharton Counties. Because of regional transport, the commission believes that this proposal will reduce ozone in ozone attainment areas, ozone near-nonattainment areas, and, in combination with other emission reduction rules, is a necessary and essential component of the one-hour attainment demonstration for ozone nonattainment areas.

In addition, the commission proposes to renumber the existing Division 2, concerning Commercial, Institutional, and Industrial Sources, as Division 3, and existing Subchapter D, concerning Administrative Provisions, as Subchapter E. Sections 117.131, 117.133 - 117.135, 117.138, 117.141, 117.143, 117.145, 117.147, and 117.149 would be placed in a new Subchapter B, Division 2, concerning Utility Electric Generation in East and Central Texas, and §§117.260, 117.261, 117.265, 117.273, 117.279, and 117.283 would be placed in a new Subchapter B, Division 4, concerning Cement Kilns. Sections 117.512 and 117.524 would be placed in the renumbered Subchapter E, concerning Administrative Provisions. The renumbering of the existing Subchapter D as Subchapter E is necessary because the commission is proposing a new Subchapter D in separate rulemaking published in this issue of the *Texas Register*.

The revisions are one element of a new combined strategy to meet the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The purpose of the strategy is to reduce overall background levels of ozone in order to assist in keeping ozone attainment areas and near-nonattainment areas in compliance with the federal ozone standards. The new strategy is also necessary to help the Beaumont/Port Arthur (BPA), Dallas/Fort Worth (DFW), and Houston/Galveston (HGA) ozone nonattainment areas as defined in 30 TAC §101.1, concerning Definitions, move closer to reaching attainment with the ozone NAAQS. The strategy takes into account recent science that shows that regional approaches may provide improved control of air pollution. In particular, staff has conducted photochemical grid modeling which indicates that 50% reductions in NO_x from elevated point sources in east and central Texas will reduce peak one-hour ozone between 14 and 27 parts per billion (ppb) in much of the region. Additional details concerning the need for a regional strategy are as follows.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

At the time the 1990 Federal Clean Air Act (FCAA) Amendments were enacted, the focus of controlling ozone pollution was on local controls. However, over the last ten years an increasing number of air quality professionals have concluded that ozone is a regional problem requiring regional strategies in addition to local control programs. As nonattainment areas across the United States prepared attainment demonstration SIPs in response to the 1990 FCAA Amendments, several areas found that modeling attainment was made much more difficult, if not impossible, because of high ozone and ozone precursor levels entering from the boundaries of their respective modeling domains, commonly called transport.

The commission has conducted air quality modeling and upper air monitoring with aircraft that found that regional air pollution from sources inside of Texas should be considered when studying air quality in Texas' ozone nonattainment areas. The Texas studies are corroborated by research studies of the Ozone Transport Assessment Group (OTAG), the most comprehensive attempt ever undertaken to understand and quantify the transport of ozone. The results of both the commission and OTAG studies point to the need to take a regional approach, as proposed in this rulemaking, to controlling air pollutants.

During the OTAG studies, the commission's modeling staff ran several sensitivity analyses for Texas using a regional modeling setup based on the Coastal Oxidant Assessment for Southeast Texas (COAST) study. This analysis used the OTAG emission inventory, updated for Texas sources, to assess the impact of potential OTAG reductions on Texas. One modeling scenario, OTAG 5c, consisting of reductions across the domain (60% reduction of point source NO_x, 30% reduction of low-level NO_x, and 30% reduction of volatile organic compounds (VOC)), indicated that modeled reductions would reduce peak eight-hour ozone by as much as 20 ppb throughout most of the eastern half of Texas. Overall, the modeling indicated that a regional reduction strategy would benefit a wide area of the state.

During modeling for the HGA attainment demonstration SIP for the one-hour ozone standard, the commission's modeling staff conducted sensitivity analyses to determine the benefits that regional reductions might have on HGA, when applied simultaneously with local reductions. Unlike the commission's regional modeling exercises discussed in the previous paragraphs, these HGA model runs offer an opportunity to assess separately the benefits of reductions made within and outside a region. Model runs with and without the regional reduction scenarios in HGA were conducted. Modeling runs were completed to evaluate the ozone concentrations in the COAST modeling domain for September 8, 1993 with year 2007 projected emissions and assuming a 70% reduction of NO_x combined with a 15% reduction of VOC in the eight-county HGA area. Even with the large reductions in HGA, much of the upper Texas Coast had ozone concentrations that challenge the one-hour standard as well as exceed the eight-hour standard. Further, Austin, Victoria, and Corpus Christi had modeled eight-hour average concentrations above the eight-hour standard. The application of OTAG 5c reductions outside the HGA eight-county area showed that the reductions are clearly beneficial to HGA, with additional ozone benefits of between five and ten ppb.

Additional modeling has been completed by commission staff assessing the potential benefits of regional NO_x reductions in the attainment counties of east and central Texas. This modeling indicates that controls which reduce all elevated point source NO_x emissions by 50% in the region will reduce peak one-hour ozone between 14 and 27 ppb in much of east and central Texas, depending on the modeling day. The one-hour ozone benefits stretch in a band across the east and central Texas counties and average six to seven ppb in the Tyler-Longview area. Based on a one-hour exceedance design value of 128 ppb, the projected benefits of 50% point source NO_x reductions in the attainment counties of east and central Texas may be large enough to prevent Longview from being reclassified as not attaining the one-hour ozone NAAQS.

Modeling tests indicate that point source NO_x reductions of less than 50% have limited ozone reduction benefit, whereas reductions at and above 50% show increasing ozone reduction

benefits. For example, in the DFW area, 25% NO_x reductions in all attainment counties of east and central Texas result in a seven to ten ppb one-hour ozone reduction, whereas 50% NO_x reductions over the same area result in a 21-27 ppb one-hour ozone reduction. Doubling the NO_x reduction from 25% to 50% provides more than twice the ozone reduction benefit. However, this test also includes reductions made in the DFW area. The benefit attributable to the regional reduction is about four to five ppb. It is clear that NO_x reductions in just the attainment counties of east and central Texas are not sufficient for DFW to attain the one-hour ozone NAAQS. Substantial reductions will still be needed within the DFW four-county nonattainment area. The commission's air quality modeling studies conducted for the DFW area show that attaining the one-hour ozone NAAQS will be difficult, and that NO_x reductions from all modeled source categories that impact DFW's air quality will be required. Therefore, reductions of 50% NO_x in the attainment counties of east and central Texas are a necessary component for the DFW area to attain the one-hour ozone NAAQS. In general, a cutoff of 50% NO_x reductions approximately represents the point at which post-combustion controls are required and was selected as the goal so that the reductions could be achieved without requiring all sources to utilize post-combustion controls.

The increasing benefit of 50% NO_x reductions is also seen in other areas of east and central Texas. In evaluating eight-hour modeling data for six episode days in the Tyler-Longview area, a 25% decline in NO_x provides an average reduction in peak eight-hour ozone of 12 ppb, whereas a 50% decline in NO_x provides an average reduction of 29 ppb. Similarly in Austin, a 25% NO_x reduction provides an average ozone benefit of six ppb, whereas a 50% reduction provides an average ozone benefit of 15 ppb. Tyler-Longview and Austin air quality monitoring data have had values in excess of the eight-hour NAAQS. The reductions in the eight-hour ozone average will be very helpful to these areas.

The commission is developing a regional strategy to reduce most categories of man-made NO_x emissions by approximately 50% in the attainment counties of east and central Texas. Emissions of NO_x come mainly from the combustion of fossil fuels, particularly motor vehicles and electric power plants. In recent years, the power plants in the attainment counties in east and central Texas accounted for nearly as much NO_x as all motor vehicles used on all roads in the region. However, recently adopted regulations requiring cleaner fuels and vehicles are projected to reduce vehicular NO_x emissions in the attainment counties in east and central Texas by 2007 to an amount approaching half of the 1996 emissions. In contrast, new regulations would be necessary in order to cut the NO_x emissions from power plants and other point sources in the region approximately in half by 2007.

Under the new emission reduction mandates contained in Senate Bill (SB) 7, 76th Legislature, 1999, the 1997 NO_x emissions of approximately 270 tons per ozone day (tpd) (daily emissions June-August) from the grandfathered electric generating facilities (EGFs) in the attainment counties of east and central Texas could be expected to decline by about 50%. However, when the SB 7 reduction requirement is expressed as a percentage reduction of the NO_x from all EGFs in the attainment counties of east and central Texas, including permitted facilities, the 50% reduction amounts to only an 18% reduction, since 480 tpd of the total EGF emissions of 750 tpd of NO_x in 1997 came from permitted facilities. In combination with the SB 7 reductions proposed in the September 10, 1999 issue of the *Texas Reg-*

ister (24 TexReg 7137) in Chapters 101, concerning General Rules, and 116, concerning Control of Air Pollution by Permits for New Construction or Modification, these proposed Chapter 117 rules would reduce 1997 EGF NO_x emissions in the attainment counties of east and central Texas by about 55%, cement kiln NO_x emissions in these counties by about 27%, and total point source NO_x emissions in these counties by about 35%. Therefore, these proposed Chapter 117 rules are a necessary component of the regional NO_x reduction strategy. As noted earlier, a 50% NO_x reduction was the goal, but in some cases technology is not available which would achieve a 50% or higher NO_x reduction. Specifically, for wet process cement kilns, selective noncatalytic reduction (SNCR) reportedly has difficulties involved in continuous injection of the reducing agents. While SNCR is apparently not applicable to wet process cement kilns, it does appear to be a promising technology for dry process cement kilns. The other post-combustion control available, selective catalytic reduction (SCR), has been tested previously on cement kilns. The application of SCR at cement kilns was found to be problematic due to the high concentrations of particulate matter in the exhaust gas stream. This leads to catalyst fouling, causing high pressure drops and reduced catalyst activity. A 30% NO_x reduction was established as the goal for cement kilns since this is a level which the commission expects can be achieved through combustion modifications. In Ellis County, the proposed rules are estimated to require a NO_x emission reduction of approximately 40% from baseline at two of the three cement plants. The third cement plant in Ellis County has already reduced its NO_x emission rate by approximately 50% from baseline.

SECTION BY SECTION ANALYSIS

The proposed changes to §117.10 add definitions of "continuous emission monitoring system (CEMS)," "predictive emissions monitoring system (PEMS)," and "twenty-four hour rolling average." The terms "CEMS" and "PEMS" are used in multiple sections of Chapter 117 but are not currently defined. The proposed definitions of CEMS and PEMS will clarify these terms. The definition of "twenty-four hour rolling average" is proposed in response to a request for clarification from electric utilities and is consistent in form with the recently adopted definition of "thirty-day rolling average" adopted on October 27, 1999. (See the November 12, 1999 issue of the *Texas Register* (24 TexReg 10113)). In addition, the proposed changes to §117.10 revise the definition of "electric power generating system" by replacing the use of this term within the definition with a reference to generation of electricity for compensation; and clarify that the rules continue to apply if the electric power generating system is sold to an entity which otherwise would not be subject to the rules. The proposed changes to the definition of "electric power generating system" further revise the definition to include boilers, steam generators, auxiliary steam boilers, and stationary gas turbines 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 the listed 31 attainment counties of east and central Texas in which EGFs are located. The proposed changes to §117.10 also revise the definition of "major source" found in §117.10(21) by adding the major source definition contained in the Prevention of Significant Deterioration of Air Quality regulations applicable in the listed 34 attainment counties of east and central Texas in which EGFs or cement kilns are located. This revision would prevent confusion caused by the title under which these Chapter 117, Subchapter B rules

are proposed: "Combustion at Existing Major Sources." In addition, the proposed revisions to §117.10 clarify the intent of the definition of "nitric acid production unit" by replacing a reference to "facility" with the term "source" and clarify the intent of the definition of "parts per million by volume (ppmv)" by replacing the reference to "rule" with a reference to the more descriptive term "chapter." The proposed revisions to §117.10 also clarify the intent of the definitions of "stationary gas turbine" and "stationary internal combustion engine" by replacing the reference to "facility" with a reference to "major source." In addition, the proposed changes to §117.10 revise the definition of "unit" by deleting language regarding the date a unit was placed into service. The language proposed for deletion is unnecessary because it duplicates language contained in §§117.103(a)(1), 117.105(k)(2), 117.203(1), and 117.205(a)(3). Finally, the proposed changes to §117.10 would update the reference to Chapter 101 to reflect the new title of this chapter adopted by the commission on December 1, 1999. (See the December 17, 1999 issue of the *Texas Register*).

The proposed new §117.131, concerning Applicability, identifies the sources affected by the proposed requirements. The proposed rule would apply to boilers and stationary gas turbines used to generate electric power which were placed into service before December 31, 1995. The proposed rule would not apply to auxiliary boilers which are sometimes present at power plants. Auxiliary boilers are much smaller than power boilers, operate rarely, and account for only 0.01% of the power plant emissions in the attainment counties of east and central Texas. Requiring these small boilers to meet the proposed emission specification would not be cost-effective, considering the emission control, monitoring, and administrative costs and the negligible emission reductions that would result. The applicability of this division is limited to the major electricity producers: electric cooperatives, independent power producers, municipalities, river authorities or public (investor owned) utilities in the specified counties. Electricity production is either the principal product, or one of the principal products of these entities. Not included are owners or operators of commercial, institutional, and industrial sources, some of whom may provide electric power to the electric grid for compensation. Among these non-utility sources are gas turbine cogeneration facilities located at certain chemical plants and refineries in the affected counties. The commission will evaluate the need for reductions from these non-utility sources separately from this proposed rulemaking. Examples of other, smaller sources outside the scope of the proposed rule include a sawmill which could use a boiler to cogenerate steam and electricity, and smaller entities, such as a recreational vehicle park owner or operator who provides electricity for park residents. Emissions related to electric generation from such commercial, institutional, and industrial sources are small, and the resulting reductions from these smaller sources would not be cost-effective.

Section 117.131 as proposed does not include units which were placed into service after December 31, 1995. Inclusion of new units is not necessary because the best available control technology requirements of new source review permitting will ensure that NO_x emissions are adequately controlled at units placed into service after that date.

The proposed new §117.133, concerning Exemptions, identifies emission units which would not be subject to the proposed new emission specification. This division does not apply to utility electric power boilers or stationary gas turbines if the annual

heat input does not exceed 2.2 (10¹¹) British thermal units (Btu) per year, averaged over three years. If operated at 2.2 (10¹¹) Btu per year or less, potential emissions are less than 30 tons per year of NO_x from any of the affected permitted gas-fired power boilers or turbines. Similarly, this division does not apply to stationary gas turbines which are used solely to power other units during start-ups; or operate less than 850 hours per year, based on a rolling 12-month average. Requiring such small emission sources to meet the proposed emission specification would not be cost-effective, considering the emission control, monitoring, and administrative costs and the negligible emission reductions that would result.

The proposed new §117.134, concerning Gas-Fired Steam Generation, relocates existing NO_x emission specifications for electric utility boilers in certain ozone attainment counties from §117.601, concerning Gas-Fired Steam Generation. In addition to the 12 DFW and HGA ozone nonattainment counties, the minimal NO_x standards of §117.601 have been applicable in 19 counties comprising the attainment counties of the Houston and Dallas/Fort Worth Air Quality Control Regions since 1972. The change brings the Chapter 117 utility boiler NO_x limits affecting ozone attainment counties into consecutive sections of a common rule division. Counties listed in §117.601 which do not contain boilers above the applicability threshold of 600,000 pounds per hour maximum steam generation capacity are proposed to be removed. Maintaining rule applicability in these counties for future units is unnecessary, because any new gas-fired boilers would be subject to much lower best available control technology emission limitations of new source review permitting. In separate rulemaking which is published elsewhere in this issue of the *Texas Register*, the commission is proposing to repeal §117.601 because the §117.601 requirements for the affected counties in ozone nonattainment areas are proposed to be relocated to the rule division for electric utility generation in ozone nonattainment areas.

The proposed new §117.135, concerning Emission Specifications, sets the NO_x emission limit at 0.165 pound (lb) of NO_x per million Btu (MMBtu) for electric power boilers not subject to SB 7, as well as electric power boilers which opt in to the SB 7 requirements. Many permitted EGFs are currently authorized to operate at an emission rate in excess of 0.165 lb/MMBtu. Specifically, current average emission rates for permitted EGFs in attainment counties in East Texas are approximately 0.33 lb NO_x/MMBtu. A reduction to 0.165 lb NO_x/MMBtu would accomplish the goal of a 50% reduction necessary to achieve regional reductions in ambient ozone. For gas-fired electric power boilers and electric power boilers which are subject to SB 7, the NO_x emission limit is at 0.14 lb NO_x/MMBtu, while for stationary gas turbines, the NO_x emission limit is at 0.15 lb NO_x/MMBtu, except those subject to SB 7 which are limited to 0.14 lb NO_x/MMBtu.

Although the NO_x standards of §117.135 are proposed in the traditional heat input-based format of lb NO_x/MMBtu, the commission may adopt the emission standards in the output-based format of lb NO_x/megawatt-hour. Output based standards allow the source owner to improve the efficiency of the regulated equipment. By harmonizing the environmental and economic goals more closely, output based standards can lower the cost of regulation compared to input-based standards. The numeric value of equivalent output based emission standards could be calculated readily from electric production records for the base-

line emission period. However, because the commission also proposes to allow emission cap compliance, which also permits efficiency improvements to contribute toward rule compliance, and offers even more flexibility, an output-based format would only be useful if a utility were likely to choose the option of direct emission compliance with the standard. The commission seeks public comment on expressing the §117.135 NO_x limits in output-based format upon adoption.

The proposed new §117.138, concerning System Cap, would create a flexible alternative to direct compliance with the NO_x emission specifications proposed in §117.135. The proposed section is patterned on the existing source cap compliance option in §117.223, for industrial, commercial and institutional combustion sources. The proposed system cap sets limits on total pounds of NO_x allowed to be emitted by an electric utility system. A cap has the advantage over rate-based standards of allowing the source owner to control the activity levels of the regulated equipment as a means of compliance. This means that a company can comply by installing less extensive emission controls and choosing to operate the regulated equipment less, or by upgrading equipment to require less fuel combustion.

The proposed averaging period for the NO_x system cap includes a 30-day rolling average daily emission limit and a maximum daily limit, consistent with the existing NO_x reasonably available control technology (RACT) source cap limits for industrial sources. The 30-day rolling average is normally the more stringent limit, because it is designed to achieve a reduction from historical actual emissions in the three highest ozone months. The proposed daily maximum limit, based on a reduction from maximum rated capacity, is designed to limit the amount of NO_x allowed in a single day in order to control ozone peaks which form within a daily cycle. The maximum daily limit is less stringent than the 30-day rolling average because even on the days of highest demand, the system does not operate continuously at maximum rated capacity the entire day.

The proposed baseline period for H_p, the historical heat input used in the 30-day rolling average of §117.138(c)(1), is July, August, and September 1996, 1997, and 1998. The baseline is intended to represent typical utility electric demand and emissions during the peak ozone formation months. An average over three years limits the influence of one particular year on the design value. Fluctuations in ambient temperature patterns often cause significant annual variation in electric demand. The commission seeks comment on the most appropriate baseline period for the historical heat input in §117.138(c)(1).

Section 117.138 as proposed does not require the inclusion of new electric generating units in the system cap. Inclusion of new units is not necessary because the best available control technology requirements of new source review permitting will ensure that NO_x emissions are adequately controlled at new units.

The proposed new §117.141, concerning Initial Demonstration of Compliance, establish the criteria for an initial demonstration of compliance at utility electric power boilers and stationary gas turbines, including testing, and installation and verification of operational status of CEMS and PEMS before the testing. The proposed requirements are parallel to existing requirements in §117.111 and §117.211, concerning Initial Demonstration of Compliance.

The proposed new §117.143, concerning Continuous Demonstration of Compliance, would require installation of CEMS or

PEMS, or less stringent monitoring requirements in some cases. Many of the electric utility boilers in the 31 affected attainment counties are currently monitoring NO_x continuously under the federal acid rain rules of 40 Code of Federal Regulations (CFR) 75; some of the smaller units not subject to the federal acid rain rules of 40 CFR 75 are required to monitor NO_x under existing new source review permitting requirements. For peaking plants, the owner or operator may choose to comply with the less stringent requirements of 40 CFR Part 75, Appendix E §1.1 or §1.2 and calculate NO_x emission rates based on those procedures, rather than install CEMS or PEMS. Similarly, for auxiliary boilers, the owner or operator may choose to comply with the appropriate (considering boiler maximum rated capacity and annual heat input) industrial boiler monitoring requirements of §117.213, concerning Continuous Demonstration of Compliance, in lieu of installing CEMS or PEMS. The relatively limited situations in which additional costs for new NO_x monitors would be necessary is expected to make the system cap an attractive option for electric utilities. The proposed requirements are parallel to existing requirements in §117.113 and §117.213, concerning Continuous Demonstration of Compliance.

The proposed new §117.145, concerning Final Control Plan Procedures, specifies certain information requirements for showing compliance with the emission specifications of §117.135, to be included in a report submitted to the executive director. The proposed requirements are parallel to existing requirements in §117.115 and §117.215, concerning Final Control Plan Procedures.

The proposed new §117.147, concerning Revision of Final Control Plan, allows the owner or operator to submit a revised final control plan, provided that the revised plan continues to demonstrate compliance with the appropriate emission limits and the final compliance dates.

The proposed new §117.149, concerning Notification, Recordkeeping, and Reporting Requirements, specify the required start-up and shutdown records, notification, reporting of test results, semiannual reports, and recordkeeping for electric power boilers and stationary gas turbines. The proposed requirements are parallel to existing requirements in §117.119 and §117.219, concerning Notification, Recordkeeping, and Reporting Requirements.

The proposed new §117.260, concerning Cement Kiln Definitions, adds definitions of clinker, long dry kiln, long wet kiln, portland cement, portland cement kiln, precalciner kiln, and preheater kiln.

The proposed new §117.261, concerning Applicability, specifies the five counties (Bexar, Comal, Ellis, Hayes, and McLennan) in which the proposed portland cement kiln requirements would apply. These are the counties in east and central Texas in which existing portland cement kilns are located. Any new cement kilns will be subject to the best available control technology (BACT) requirements of the commission's new source review permitting (NSRP) program. The NSRP BACT requirements are at least as stringent as the requirements proposed in this rulemaking, and therefore it is unnecessary for the proposal to include counties other than the five listed counties.

The proposed new §117.265, concerning Emission Specifications, establishes emission limits on the basis of pounds of NO_x per ton of clinker produced. These emission limits are based on the NO_x emissions for a 30-day rolling average, and vary depending on the type of cement kiln (long wet; long dry; pre-

heater; preheater-precalciner; or precalciner). The proposed emission limits are identical to those specified in the United States Environmental Agency's (EPA) notice of proposed rule-making concerning Federal Implementation Plans to Reduce the Regional Transport of Ozone which was published in the October 21, 1998 issue of the *Federal Register* (63 FR 56394). The EPA stated that these limits are designed to achieve a 30% decrease in NO_x emissions from uncontrolled levels. Based upon current technology, the commission believes that these are the highest reductions achievable with reasonable control measures. The commission solicits comments regarding the technical feasibility and cost-effectiveness of NO_x emission reductions beyond those which would be achieved by the rules proposed in this division, concerning Cement Kilns. If the commission determines that NO_x emission reductions beyond those which would be achieved by the rules proposed in this division are technically feasible and cost-effective, then in the adoption of the final cement kiln rules the commission may incorporate more stringent emission reduction requirements.

In addition, the commission solicits comments concerning the feasibility of obtaining NO_x reductions at cement plants through requirements for low-emitting trucks, reduced vehicle miles traveled, and reductions from combustion sources at cement plants other than the cement kilns. Any such suggestions or comments received will not be included in the analysis of testimony for this rulemaking, but will be considered for future separate action as appropriate.

The proposed new §117.273, concerning Continuous Demonstration of Compliance, requires the installation, calibration, maintenance, and operation of a CEMS or PEMS to monitor kiln exhaust NO_x. Either a CEMS or PEMS is necessary in order to determine continuous compliance with the emission limits.

The proposed new §117.279, concerning Notification, Record-keeping, and Reporting, requires notification concerning CEMS or PEMS performance evaluation and submission of any CEMS or PEMS relative accuracy test audit. The proposed §115.257 also requires monitoring records of daily NO_x emissions, daily production of clinker, average NO_x emission rate (30-day rolling average), stack sampling results, and the results of initial certification testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS and PEMS.

The proposed new §117.283, concerning Source Cap, provides an alternative to complying with the NO_x emission limits of §117.265. Specifically, the proposed §117.283 allows an owner or operator to choose to reduce total NO_x emissions (in tpd) from all cement kilns at the account to at least 30% less than the total NO_x emissions (in tpd) from all cement kilns in the account's 1997 emissions inventory. At cement plants with multiple kilns, this will allow NO_x emission reductions to be achieved at these kilns in whatever manner the owner or operator considers to be the most cost-effective and technically feasible. Any cement kilns placed into service on or after December 31, 1999, are included in order to allow a new cement kiln's lower NO_x emission rate to be credited toward the NO_x emission reductions needed by older cement kilns at the same account. The proposed §117.283 is not available in Ellis County in order to ensure that the maximum possible NO_x emissions are achieved in Ellis County and assist the DFW area move closer to reaching attainment with the ozone NAAQS.

The proposed new §117.512, concerning Compliance Schedule for Utility Electric Generation in East and Central Texas, would

set a compliance date of May 1, 2003. The proposed date allows approximately 40 months, or slightly more than three years, to achieve emission compliance. A two-year implementation schedule has been considered necessary but achievable for other emission reduction requirements in Chapter 117. The FCAA requires states to develop SIPs that will result in attainment as expeditiously as practicable, and compliance with regional NO_x reduction rules by May 1, 2003, has been considered by EPA to be necessary for such expeditious attainment of the ozone NAAQS. For EGFs, an additional year for compliance appears necessary to allow adequate time for new source review permit authorization, design engineering, equipment procurement, and installation.

The proposed new §117.524, concerning Compliance Schedule for Cement Kilns, establishes a compliance date of May 1, 2003. The proposed date allows approximately 40 months, or slightly more than three years, to achieve emission compliance. A two-year implementation schedule has been considered necessary but achievable for other emission reduction requirements in Chapter 117. Because of the unique nature of cement kilns, the commission believes it is appropriate to allow approximately three years for new source review permit authorization, design engineering, equipment procurement, and installation.

The commission is requesting comments on what, if any, emission banking and trading program should be developed to offer alternative means of compliance for facilities required to make NO_x reductions for SIP purposes. The commission is exploring the possibility of either the creation of a mass cap and trade system or revising the existing emission banking and trading system in Chapter 101, General Air Quality Rules, §101.29, concerning Emissions Banking and Trading.

A mass cap and trade system would require that the commission allocate allowances to participating facilities. Each allowance would be an authorization to emit a specific amount of NO_x, for example 100 tons. Each participating facility would be required to have allowances equal to or greater than its emissions during a specific control period. The control period could be identified as an ozone season, a 12-month period, or some other appropriate period. Allowances could be traded from one facility to another so a facility that reduced emissions below its allotted allowances could sell excess allowances to another facility or a broker. Additionally, a facility that finds required reductions to be cost-prohibitive can purchase equivalent credits to meet its burden of compliance. This option would require monitoring and reporting on a regular basis to assure that compliance with the allowances is met. This system would put a cap on all emissions from participating facilities. Participation in this type of system is usually mandatory to insure that participating facilities must comply with equivalent emission requirements. An allowance trading system could be similar to the Emissions Banking and Trading of Allowances System proposed under Subchapter H of Chapter 101, implementing the allowance trading requirements of SB 7. (See the September 10, 1999, issue of the *Texas Register* (24 TexReg 7137).

The existing emission reduction credit (ERC) and discrete ERC (DERC) trading systems are based on the concepts of open market systems. Participation is not mandatory; facilities have the option of either complying with the emission standard or using emission credits to offset the emission standard. Those sources choosing to participate in the open market system would quantify their reductions from a set baseline. These

reductions could then be purchased and used by other sources to satisfy their NO_x reduction obligation.

If a mass cap and trade system were proposed, the commission requests comment on the following issues: trading restrictions; expiration of allowances; addition of new sources into the system; initial allotment of allowances; and relationship to federal new source review permitting (prevention of significant deterioration (PSD) and nonattainment).

If the existing trading program is relied on to provide flexibility, the commission requests comments on what changes need to be made to address the following issues: insuring that banked emissions are not also used towards any SIP demonstration (double counting); usability of the trading system; and baseline.

The commission is requesting comments on these issues and any other issues that might be relevant to the development of an emission banking and trading program. Since the commission is not proposing a program at this time, the preamble at adoption will not include an analysis of the comments on this issue. The purpose of soliciting these comments is to assist the commission in the development of an emission banking and trading program. Before proposing any emissions banking and trading program, the commission will hold a stakeholder meeting to discuss the comments received and solicit input before proposal.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

Since 30 TAC Chapter 117 is an applicable requirement under 30 TAC Chapter 122, owners or operators subject to the Federal Operating Permit Program must, consistent with the revision process in Chapter 122, revise their operating permit to include the revised Chapter 117 requirements for each emission unit affected by the revisions to Chapter 117 at their site.

FISCAL NOTE

Bob Orozco, a technical specialist in the Strategic Planning and Appropriations Section, has determined that for the first five-year period the proposed amendments are in effect there will be no significant fiscal implications for the commission and most units of state and local government as a result of administration or enforcement of the proposed amendments. The proposed amendments may require certain units of local government and river authorities that own and operate EGFs to reduce emissions from those facilities. The fiscal implications for units of state and local government with affected EGFs will be addressed in the PUBLIC BENEFIT section of this preamble.

The proposed amendments to Chapter 117 require electric power boilers and gas fired turbines to reduce NO_x to an emission rate of 0.165 lb/MMBtu or less. In addition, the proposed amendments would require cement kilns to reduce NO_x emissions to levels specified in the EPA's notice of proposed rule-making concerning Federal Implementation Plans to Reduce the Regional Transport of Ozone which was published in the October 21, 1998, issue of the *Federal Register* (63 FR 56394). These levels of emissions are consistent with plans to attain and maintain the requirements of the NAAQS.

The cement plants and EGFs which will have to comply with the proposed rules are currently subject to air permits and/or to other requirements under federal rules, and therefore are already being inspected for compliance. Consequently, no additional EGFs and cement kilns will need to be inspected

for compliance with the proposed rules. The commission anticipates that the Field Operations Division inspectors will inspect for compliance with the proposed requirements when conducting their routine inspections. However, these rules will cause a minor increase in workload when inspecting the affected facilities.

PUBLIC BENEFIT - EGFs

Mr. Orozco has determined that for each year of the first five years the proposed amendments to Chapter 117 are in effect, the public benefit anticipated from enforcement of and compliance with the proposed amendments will be a reduction of air contaminants emitted from affected EGFs and the concomitant reduced risks to human health and safety. In addition, the public benefit includes increased flexibility for affected EGFs in planning and determining the most economical mix of control technology alternatives.

The proposed amendments apply to any EGF located in any of the 31 attainment counties in east and central Texas as listed in proposed §117.131. The proposed emission reductions may be met by installing control technologies to reduce emissions.

For purposes of this fiscal note, the estimated total annualized cost to EGFs of implementing the provisions of the proposed amendments consists of the cost of installing and operating the control technology sufficient to insure that emission allowances are not exceeded.

In February 1999, the Public Utility Commission of Texas (PUCT) and the commission published a report entitled, "Electric Restructuring and Air Quality: A Preliminary Analysis of Reductions and Costs of Nitrogen Oxides Controls from Electric Utility Boilers in Texas." The PUCT and the commission used information collected from generation-owning utilities in Texas to assess the potential costs of NO_x emission reductions that could be required from existing utility power plants. Costs were estimated at an emission rate of 0.15 lb NO_x/MMBtu which is close to the 0.165 lb NO_x/MMBtu specified in the proposed amendments. The average annual cost estimated by the utilities of applying a control technology to attain this level of reductions was approximately \$4,000 per ton of emissions reduced. This average annual cost per ton of emissions reduced includes annualized capital costs plus the additional annual operating costs associated with the applied technology. Generic reduction and cost factors were used in the study, but individual companies and specific units will most likely have different costs. This variability in cost depends on the amount of emission reductions, the specific processes involved, the size of the facility, and control methodologies employed for emission reductions. The data also indicates that EGFs with the largest required emission reductions have the lowest cost per ton of emissions reduced. In general, the annualized cost for emission reductions is inversely proportional to the amount of emissions required because when larger emission reductions are required, the average cost is spread over more tons reduced.

Thirteen of the EGFs affected by this rule are municipal or electric cooperative EGFs. These EGFs are located in San Miguel, Greenville, Bryan, and Austin. Data are available for one of these plants. The San Miguel coal-fired EGF will be required to reduce emissions by 4,768 tons, at an estimated annualized cost of \$5,288 per ton reduced, or approximately \$25 million. It is anticipated that the cost associated of reducing emissions from municipally owned stationary gas turbines will be less than \$4,000 per ton. It is anticipated that the costs for

the Austin Decker 2 EGF and the Bryan Dansby EGF will be similar to the costs for the other plants in the PUCT/commission report, or approximately \$4,000 per ton of emissions reduced.

The intent of the amendments to Chapter 117 is to reduce regional levels of ozone, thereby moving nonattainment and near-nonattainment areas closer to achieving attainment of the NAAQS. These revisions are an integral part of the commission's overall goal of reducing ozone precursors, and complement other strategies already adopted or soon to be proposed. Other strategies include control requirements for other industries as well as controls for mobile and area sources of emissions.

PUBLIC BENEFIT - CEMENT KILNS

Mr. Orozco has also determined that for each year of the first five years the proposed amendments to Chapter 117 are in effect, the public benefit anticipated from enforcement of and compliance with the proposed amendments will be a reduction of air contaminants emitted from affected cement kilns and the concomitant reduced risks to human health and safety.

The proposed amendments apply to nine existing cement plants located in five counties (Bexar, Comal, Ellis, Hayes, and McLennan Counties) in the eastern half of Texas. The proposed emission reductions may be met by a variety of control technologies and/or process controls to reduce emissions. The rules do not mandate a specific method to be used to meet the emission limits, but instead allow the owner or operator to determine the method which is most cost-effective for each cement kiln. In Ellis County, the proposed rules are estimated to require a NO_x emission reduction of approximately 40% from baseline at two of the three cement plants. The third cement plant in Ellis County has already reduced its NO_x emission rate by approximately 50% from baseline. A summary of the nine existing cement plants and the estimated emission reductions are as follows:

Figure 1: 30 TAC Chapter 117-Preamble

The commission estimates the average cost-effectiveness (the cost per ton of NO_x emissions reduced) to be approximately \$1,458 per ton, based upon the EPA's *Regulatory Impact Analysis for the NO_x SIP Call, FIP, and Section 126 Petitions, Volume 1: Costs and Economic Impacts* (EPA-452/R-98-003, September 1998). Based upon this document, the average annual control costs are approximately \$5.3 million per kiln, with average annual monitoring/administrative costs estimated at \$975,000 per kiln. It should be noted that because the EPA grouped all kilns together in their cost estimates, the costs for some kilns may be significantly higher, while others will be significantly lower. Because the cost for certain kilns may be too high to be considered reasonable, the commission is proposing the availability of §117.283, concerning Source Cap, for such situations.

The commission estimates the initial cost of a CEMS which monitors NO_x, oxygen, and flow to be approximately \$137,400 to \$179,600, with total annual costs of \$64,800 to \$66,000, based upon *U.S. Environmental Protection Agency's Continuous Emission Monitoring System Cost Model, Version 3.0*. It should be noted that this cost model provides the initial costs (including capital and installation costs) and annual costs (operating costs) for a single CEMS installed to monitor emissions from one source at a plant. In the cost model's user manual, the EPA notes that the cost model is not intended for use in estimat-

ing the costs for multiple CEMS to monitor multiple sources at a plant. Simply multiplying the number of CEMS by the model's result will overestimate the total cost since some of the costs are not repeated with the addition of a second CEMS or more.

Based on vendor quotes, it appears that the cost of CEMS has been dropping, such that the EPA cost model overestimates both the initial and annual costs. In addition, the proposed rule allows multiple kilns to share one CEMS, as well as allowing PEMS as an alternative to CEMS, which should further reduce the costs of complying with the proposed rule. However, the costs estimated by the EPA's cost model could be expected to represent an upper bound of the monitoring costs.

SMALL BUSINESS AND MICRO-BUSINESS IMPACT ANALYSES

Based on the expected revenues from the smallest generators and the number of employees defined as a micro-business, there are no known small businesses or micro-businesses as defined in the Texas Government Code with EGFs which would be affected by these proposed amendments to Chapter 117. If there are affected small business or micro-business EGFs, the estimated annualized cost that was used for the industry at large for installing and operating the control technology of approximately \$4,000 per ton of emissions reduced would appear to be an acceptable estimate.

For cement kilns, the commission has reviewed the emissions inventory and did not identify any small businesses or micro-businesses among the sources subject to the proposed rules. Consequently, no adverse economic effects are anticipated to any small businesses or micro-businesses as a result of implementing the proposed cement kiln rules because there are no known small businesses or micro-businesses which will be subject to the proposed rules.

DRAFT REGULATORY IMPACT ANALYSIS

The commission has reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking meets the definition of a "major environmental rule" as defined in that statute. "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 proposed amendments to Chapter 117 will require emission reductions from cement kilns and utility electric boilers and stationary gas turbines in attainment counties in east and central Texas. The proposed rules are intended to protect the environment and may have adverse effects on certain EGFs and cement kilns which could be considered a sector of the economy.

Although the proposed amendments meet the definition of a "major environmental rule" as defined in the Texas Government Code, they do not meet any of the four applicability requirements listed in §2001.0225(a). Specifically, the emission limitations and control requirements within this proposal were developed in order to meet the NAAQS for ozone set by EPA under FCAA, §109, and therefore meet a federal requirement. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once EPA has established them. Under FCAA, §110 and related provisions, states must submit, for approval by

EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. The commission has performed photochemical grid modeling which predicts that the controls required by these rules will result in reductions in ozone formation in one or more nonattainment areas in Texas. This proposal is not an express requirement of state law, but was developed specifically in order to meet the air quality standards established under federal law as NAAQS. Specifically, this proposal is intended to help bring ozone nonattainment areas into compliance, and to help keep attainment and near-nonattainment areas from going into nonattainment. The proposed amendments do not exceed a standard set by federal law, exceed an express requirement of state law (unless specifically required by federal law), or exceed a requirement of a delegation agreement. The proposed amendments were not developed solely under the general powers of the agency, but were specifically developed to meet the air quality standards established under federal law as the NAAQS and under Texas Clean Air Act (TCAA), §382.012. The commission invites public comment on the draft regulatory impact analysis.

TAKINGS IMPACT ASSESSMENT

The commission has completed a takings impact assessment for the proposed rules. The following is a summary of that assessment. The proposed amendments would require NO_x emission reductions from cement kilns located in Bexar, Comal, Ellis, Hayes, and McLennan Counties. The proposed amendments would also require NO_x emission reductions from utility electric power boilers and stationary gas turbines that generate electric energy for compensation owned or operated by an electric cooperative, independent power producer, municipality, river authority, or public utility 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, and Wharton Counties.

The proposed revisions are one element of a new strategy to meet the NAAQS for ground-level ozone. The strategy is necessary to reduce overall background levels of ozone in order to assist in keeping ozone attainment areas and near-nonattainment areas in compliance with federal ozone standards. The strategy and the modeling supporting it are discussed in other sections of this preamble. Promulgation and enforcement of the rule amendments may possibly burden private real property because the permanent installation of new equipment, such as low NO_x burners or post-combustion controls, may be necessary for EGFs and cement kilns to comply with the proposed requirements. Although the rule revisions do not directly prevent a nuisance, prevent an immediate threat to life or property, or prevent a real and substantial threat to public health and safety, the rule revisions fulfill a federal mandate under §110 of the 1990 Amendments to the FCAA. Specifically, the emission limitations and control requirements within this proposal were developed in order to meet the NAAQS for ozone set by the EPA under §109 of the FCAA. States are primarily responsible for ensuring attainment and maintenance of NAAQS once the EPA has established them. Under §110 of the FCAA and related provisions, states must submit, for approval by the EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, the purpose of this rulemaking is to meet the air qual-

ity standards established under federal law as NAAQS. Consequently, the following exemption applies to these rules: an action reasonably taken to fulfill an obligation mandated by federal law.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has determined that this rulemaking relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with Texas Coastal Management Program. As required by 31 TAC §505.11(b)(2) and 30 TAC §281.45(a)(3), relating to actions and rules subject to the CMP, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission has reviewed this action for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council. For this proposal, the commission has determined that the rules are consistent with the applicable CMP goal expressed in 31 TAC §501.12(1) of protecting and preserving the quality and values of coastal natural resource areas, and the policy in 31 TAC §501.14(q), which requires that the commission protect air quality in coastal areas. This proposal is intended to reduce overall emissions of NO_x from cement kilns and electric utility boilers and stationary gas turbines. This action is consistent with the CMP because it does not authorize any new emissions and will reduce existing emissions of NO_x. Interested persons may submit comments during the public comment period on the consistency of the proposed rule with the CMP goals and policies.

PUBLIC HEARINGS

The commission will hold public hearings on this proposal at the following times and locations: January 24, 2000, 2:00 p.m., City of El Paso Council Chambers, 2 Civic Center Plaza, 2nd floor, El Paso; January 25, 2000, 10:00 a.m., Building E, Room 201S, Texas Natural Resource Conservation Commission Complex, 12100 Park 35 Circle, Austin; January 26, 2000, 10:00 a.m., Longview City Hall Council Chambers, 300 West Cotton Street, Longview; January 26, 2000, 7:00 p.m., City of Irving Central Library Auditorium, 801 West Irving Boulevard, Irving; January 27, 2000, 10:00 a.m., Dallas Public Library Auditorium, 1515 Young Street, Dallas; January 27, 2000, 7:00 p.m., Lewisville City Council Chambers, Municipal Center, Lewisville; January 28, 2000, 10:00 a.m., Council Chambers, 2nd floor, Fort Worth City Hall, 1000 Throckmorton Street; January 31, 2000, 1:30 p.m., John Gray Institute, 855 Florida Avenue, Beaumont; and January 31, 2000, 7:00 p.m., Houston-Galveston Area Council, 3555 Timmons Lane, Houston. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearings; however, agency staff members will be available to discuss the proposal 30 minutes prior to the hearings and will answer questions before and after the hearings.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearings should contact the Office of Environmental Policy,

Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Comments may be submitted to Lola Brown, MC 205, Office of Environmental Policy, Analysis, and Assessment, Texas Natural Resource Conservation Commission, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. All comments should reference Rule Log Numbers 99046- 117-AI and 99049-117-AI. Comments must be received by 5:00 p.m., February 1, 2000. For further information, please contact Randy Hamilton of the Strategic Assessment Division at (512) 239-1512 or Eddie Mack, also of the Strategic Assessment Division, at (512) 239-1488.

Subchapter A. DEFINITIONS

30 TAC §117.10

STATUTORY AUTHORITY

The amendment is proposed under the Texas Health and Safety Code, TCAA, §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

The proposed amendment implements the Texas Health and Safety Code, TCAA, §§382.011, 382.012, and 382.017.

§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 shall have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply, unless the context clearly indicates otherwise.

(1)-(8) (No change.)

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

(11) [(40)] Electric power generating system: [-]

(A) All boilers, steam generators, auxiliary steam boilers, and stationary gas turbines that generate electric energy for compensation [used in an electric power generating system which]; are owned or operated by a municipality or a Public Utility Commission of Texas regulated utility, or any of its successors; and [that] are located in [within] the Beaumont/Port Arthur, Dallas/Fort Worth, or Houston/Galveston ozone nonattainment areas; and

(B) All boilers, steam generators, auxiliary steam boilers, and stationary gas turbines 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, Lime-

stone, Marion, McLennan, Milam, Morris, Nueces, Parker, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.

(12) [(44)] Functionally identical replacement - A unit that performs the same function as the existing unit which 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.

(13) [(42)] 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 carbon monoxide 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.

(14) [(43)] 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 (Btu) per hour per cubic foot.

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

(16) [(45)] Industrial boiler or steam generator - 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.

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

(18) [(47)] 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.

(19) [(48)] Low annual capacity factor boiler, process heater, or gas turbine supplemental waste heat recovery unit - A commercial, institutional, or industrial boiler; process heater; or gas turbine supplemental waste heat recovery unit with maximum rated capacity:

(A) greater than or equal to 40 million Btu per hour (MMBtu/hr), but less than 100 MMBtu/hr and an annual heat input less than or equal to 2.8(10¹¹) Btu 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(10¹¹) Btu/yr, based on a rolling 12-month average.

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

(21) [(20)] Low heat release rate - A ratio of boiler design heat input to firebox volume less than 70,000 Btu per hour per cubic foot.

(22) [(21)] 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_x) and is located in the Beaumont/Port Arthur ozone nonattainment area;

(B) at least 50 tpy of NO_x and is located in the Dallas/Fort Worth ozone nonattainment area; [ø€]

(C) at least 25 tpy of NO_x and is located in the Houston/Galveston ozone nonattainment area; or [-]

(D) the amount specified in the major source definition contained in the Prevention of Significant Deterioration of Air Quality regulations promulgated by EPA in Title 40 Code of Federal Regulations (CFR) §52.21 as amended June 3, 1993 (effective June 3, 1994) and is located in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Comal, Ellis, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Hayes, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Parker, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.

(23) [(22)] Maximum rated capacity - The maximum design heat input, expressed in MMBtu/hr, 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 shall 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 shall 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 shall be used as the maximum rated capacity, unless limited by permit condition to a lesser heat input, in which case the limiting condition shall 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 conditions shall be used as the maximum rated capacity, unless limited by permit condition to a lesser heat input, in which case the limiting condition shall be used as the maximum rated capacity.

(24) [(23)] Megawatt (MW) rating - The continuous MW rating or mechanical equivalent by a gas turbine manufacturer at ISO 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.

(25) [(24)] Nitric acid - Nitric acid which is 30% to 100% in strength.

(26) [(25)] Nitric acid production unit - Any source [facility] producing nitric acid by either the pressure or atmospheric pressure process.

(27) [(26)] Nitrogen oxides (NO_x) - The sum of the nitric oxide and nitrogen dioxide in the flue gas or emission point, collectively expressed as nitrogen dioxide.

(28) [(27)] Parts per million by volume (ppmv) - All ppmv emission limits specified in this chapter [rule] are referenced on a dry basis.

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

(30) [(29)] Plant-wide emission limit - 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.

(31) [(30)] 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.

(32) Predictive emission 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, graph, or computer program to produce results in units of the applicable emission limitation.

(33) [(34)] Process heater - Any combustion equipment fired with liquid and/or gaseous fuel which 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 or steam generators as defined in this section.

(34) [(32)] 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.

(35) [(33)] 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 at a major source [facility] or is portable equipment operated at a specific major source [facility] for more than 90 days in any 12-month period. Two or more gas turbines powering one shaft shall be treated as one unit.

(36) [(34)] Stationary internal combustion engine - A reciprocating engine either attached to a foundation or if not so attached is operated or is intended to be operated at a single major source [facility] for more than six months, including any replacement engine for a specific application which lasts or is intended to last for more than six months.

(37) [(35)] System-wide emission limit - 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 shall be used in lieu of maximum rated capacities for the purpose of calculating the system-wide emission limit.

(38) [(36)] 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 shall be used in lieu of maximum rated capacities for the purpose of calculating the system-wide emission rate.

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

(40) 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), as the average of all the hourly emissions data for the preceding 24 hours that fuel was combusted in the unit.

(41) [(38)] Unit - Any boiler, steam generator, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section [; which is either:]

[(A) placed into service prior to November 15, 1992; or]

[(B) placed into service after June 9, 1993 as functionally identical replacement for an existing unit or group of units subject to the provisions of this chapter. Any emission credits resulting from the operation of such units shall be limited to the cumulative maximum rated capacity of the units replaced].

(42) [(39)] Utility boiler or steam generator - Any combustion equipment owned or operated by a municipality 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.

(43) [(40)] 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.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

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Margaret Hoffman

Director, Environmental Law Division

Texas Natural Resource Conservation Commission

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For further information, please call: (512) 239-0348



Subchapter B. COMBUSTION AT EXISTING MAJOR SOURCES

Division 2. UTILITY ELECTRIC GENERATION IN EAST AND CENTRAL TEXAS

30 TAC §§117.131, 117.133 - 117.135, 117.138, 117.141, 117.143, 117.145, 117.147, 117.149

STATUTORY AUTHORITY

The new sections are proposed under the Texas Health and Safety Code, TCAA, §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's

air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

The proposed new sections implement the Texas Health and Safety Code, TCAA, §§382.011, 382.012, and 382.017.

§117.131. Applicability.

The provisions of this division shall apply to each utility electric power boiler and stationary gas turbine that

(1) generates electric energy for compensation;

(2) is owned or operated by an electric cooperative, independent power producer, municipality, river authority, or public utility;

(3) was placed into service before December 31, 1995; and

(4) is 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.

§117.133. Exemptions.

The provisions of this division, except as may be specified in §117.143 and §117.149 of this title (relating to Continuous Demonstration of Compliance; and Notification, Recordkeeping, and Reporting Requirements), do not apply to:

(1) permitted utility electric power boilers or stationary gas turbines if the annual heat input does not exceed 2.2 (10¹¹) British thermal units per year, averaged over the three most recent calendar years; and

(2) stationary gas turbines which are:

(A) used solely to power other units during start-ups; or

(B) demonstrated to operate less than 850 hours per year, based on a rolling 12-month average.

§117.134. Gas-Fired Steam Generation.

(a) Subsections (b), (c), and (d) of this section (emission specifications adopted by the Texas Air Control Board in 1972) apply in Fannin, Hood, and Palo Pinto Counties. This section shall no longer apply in Fannin and Hood Counties after the applicable final compliance date specified in §117.512 of this title (relating to Compliance Schedule for Utility Electric Generation in East and Central Texas).

(b) No person shall allow emissions of nitrogen oxides (NO_x), calculated as nitrogen dioxide (NO₂), from any "opposed-fired" steam generating unit of more than 600,000 pounds per hour (lbs/hr) maximum continuous steam capacity to exceed 0.7 pound per million British thermal units (lb/MMBtu) heat input, maximum two-hour average, at maximum steam capacity. An "opposed-fired" steam generating unit is defined as a unit having burners installed on two opposite vertical firebox surfaces.

(c) No person shall allow emissions of NO_x, calculated as NO₂, from any "front-fired" steam generating unit of more than 600,000 lbs/hr maximum continuous steam capacity to exceed 0.5 lb/MMBtu heat input, maximum two-hour average, at maximum steam

capacity. A "front-fired" steam generating unit is defined as a unit having all burners installed in a geometric array on one vertical firebox surface.

(d) No person shall allow emissions of NO_x calculated as NO_x from any "tangential-fired" steam generating unit of more than 600,000 lbs/hr maximum continuous steam capacity to exceed 0.25 lb/MMBtu heat input, maximum two-hour average, at maximum steam capacity. A "tangential-fired" steam generating unit is defined as a unit having burners installed on all corners of the unit at various elevations.

(e) Existing gas-fired steam generating units of more than 600,000 lbs/hr, but less than 1,100,000 lbs/hr, maximum continuous steam capacity are exempt from the provisions of this section, provided the total steam generated from the unit during any one calendar year does not exceed 30% of the product of the maximum continuous steam capacity of the unit times the number of hours in a year. Written records of the amount of steam generated for each day's operation shall be made on a daily basis and maintained for at least three years from the date of each entry. Such records shall be made available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction.

§117.135. Emission Specifications.

In accordance with the compliance schedule in §117.512 of this title (relating to Compliance Schedule for Utility Electric Generation in East and Central Texas), the owner or operator of each utility electric power boiler or stationary gas turbine shall ensure that emissions of nitrogen oxide (NO_x) do not exceed the following rates, in pound per million British thermal unit (lb/MMBtu) heat input on an annual (calendar year) average:

(1) electric power boilers:

(A) gas-fired, 0.14;

(B) coal-fired:

(i) subject to Texas Utilities Code (TUC), §39.264 (except units designated in accordance with TUC, §39.264(i)), 0.14;

(ii) not subject to TUC, §39.264, 0.165;

(iii) units designated in accordance with TUC, §39.264(i), 0.165;

(2) stationary gas turbines:

(A) subject to TUC, §39.264, (except units designated in accordance with TUC, §39.264(i)), 0.14;

(B) not subject to TUC, §39.264, 0.15; and

(C) units designated in accordance with TUC, §39.264(i), 0.15.

§117.138. System Cap.

(a) An owner or operator may achieve compliance with the nitrogen oxides (NO_x) emission limits of §117.135 of this title (relating to Emission Specifications) by achieving equivalent NO_x emission reductions obtained by compliance with a system cap emission limitation in accordance with the requirements of this section.

(b) Each unit within an electric power generating system, as defined in §117.10 of this title (relating to Definitions), that would otherwise be subject to the NO_x emission limits of §117.135 of this title must be included in the system cap.

(c) The system cap shall be calculated as follows.

(1) A rolling 30-day average emission cap shall be calculated using the following equation:
Figure: 30 TAC §117.138(c)(1)

(2) A maximum daily cap shall be calculated using the following equation:
Figure: 30 TAC §117.138(c)(2)

(3) Each unit in the system cap shall be subject to the emission limits of both paragraphs (1) and (2) of this subsection at all times.

(d) The NO_x emissions monitoring required by §117.143 of this title (relating to Continuous Demonstration of Compliance) for each unit in the system cap shall be used to demonstrate continuous compliance with the system cap.

(e) For each operating unit, the owner or operator shall use one of the following methods to provide substitute emissions compliance data during periods when the NO_x monitor is off-line:

(1) if the NO_x monitor is a continuous emissions monitoring system (CEMS):

(A) Appendix E monitoring in accordance with §117.143(d) of this title;

(B) the maximum emission rate as measured by the testing conducted in accordance with §117.141(d) of this title (relating to Initial Demonstration of Compliance); or

(C) predictive emissions monitoring system (PEMS) monitoring in accordance with §117.143(f) of this title; or

(2) if the NO_x monitor is a PEMS, the methods specified in 40 Code of Federal Regulations §75.46.

(f) The owner or operator of any unit subject to a system cap shall maintain daily records indicating the NO_x emissions and fuel usage from each unit and summations of total NO_x emissions and fuel usage for all units under the system cap on a daily basis. Records shall also be retained in accordance with §117.149 of this title (relating to Notification, Recordkeeping, and Reporting Requirements).

(g) The owner or operator of any unit subject to a system cap shall report any exceedance of the system 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 which 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 §117.149 of this title.

(h) The owner or operator of any unit subject to a system cap shall demonstrate initial compliance with the system cap in accordance with the schedule specified in §117.512 of this title (relating to Compliance Schedule for Utility Electric Generation in East and Central Texas).

(i) A unit which is permanently retired or decommissioned and rendered inoperable may be included in the source cap emission limit. The source cap emission limit is calculated in accordance with subsection (b) of this section.

(j) Emission reductions from shutdowns or curtailments which have been used for netting or offset purposes under the requirements of Chapter 116 of this title may not be included in the baseline for establishing the cap.

(k) 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 upset period shall be calculated from the NO_x emission rate measured by the NO_x monitor, if operating properly. If the NO_x monitor is not operating properly, the substitute data procedures identified in subsection (d) of this section must be used. If neither the NO_x monitor nor the substitute data procedure are operating properly, the owner or operator must use the maximum daily rate measured during the initial demonstration of compliance, 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.

§117.141. Initial Demonstration of Compliance.

(a) The owner or operator of all units which are subject to the emission limitations of this division (relating to Utility Electric Generation in East and Central Texas) must be tested as follows.

(1) Test for nitrogen oxides (NO_x), carbon monoxide (CO), and oxygen (O₂) emissions.

(2) Units which inject urea or ammonia into the exhaust stream for NO_x control shall be tested for ammonia emissions.

(3) Testing shall be performed in accordance with the schedule specified in §117.512 of this title (relating to Compliance Schedule for Utility Electric Generation in East and Central Texas).

(b) The tests required by subsection (a) of this section shall be used for determination of initial compliance with the emission limits of this division. Test results shall be reported in the units of the applicable emission limits 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 §117.211(g) of this title (relating to Initial Demonstration of Compliance).

(c) Continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) required by §117.143 of this title (relating to Continuous Demonstration of Compliance) shall be installed and operational before testing under subsection (a) of this section. Verification of operational status shall, 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 §117.143 of this title shall be demonstrated after monitor certification testing using the NO_x CEMS or PEMS as follows.

(1) To comply with the NO_x emission limit in pound per million British thermal units (MM/Btu) on an annual average, NO_x emissions from a unit are monitored for each unit operating day in a calendar year, and the annual average emission rate is used to determine compliance with the NO_x emission limit. The annual average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during a calendar year.

(2) For units complying with §117.138 of this title (relating to System Cap), a rolling 30-day average of total daily pounds of NO_x emissions from the units are monitored (or calculated in accordance with §117.138(e) of this title) for 30 successive system operating days and the 30-day average emission rate is used to determine compliance with the NO_x 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.

§117.143. Continuous Demonstration of Compliance.

(a) Nitrogen oxides (NO_x) monitoring. The owner or operator of each unit subject to the emission specifications of this division (relating to Utility Electric Generation in East and Central Texas) 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_x on an individual basis.

(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 following methods:

(1) install, calibrate, maintain, and operate a:

(A) CEMS in accordance with subsection (c) of this section; or

(B) PEMS in accordance with subsection (f) of this section; or

(2) sample CO as follows:

(A) with a portable analyzer (or 40 Code of Federal Regulations (CFR) 60, Appendix A reference method test apparatus) after manual combustion tuning or manual burner adjustments conducted for the purpose of minimizing NO_x emissions whenever, following such manual changes, either:

(i) NO_x emissions are sampled with a portable analyzer or 40 CFR 60, Appendix A reference method test apparatus; or

(ii) the resulting NO_x emissions measured by CEMS or predicted by PEMS are lower than levels for which CO emissions data was previously gathered; and

(B) sample CO emissions using the test methods and procedures of 40 CFR 60 in conjunction with the annual relative accuracy test audit of the NO_x and diluent analyzer.

(c) CEMS requirements.

(1) Any CEMS required by this section shall be installed, calibrated, maintained, and operated in accordance with 40 CFR, Part 75 or 40 CFR, Part 60, as applicable.

(2) One CEMS may be shared among units, provided:

(A) the exhaust stream of each unit is analyzed separately; and

(B) the CEMS meets the applicable certification requirements of paragraph (1) of this subsection for each exhaust stream.

(d) Acid rain peaking units. The owner or operator of each peaking unit as defined in 40 CFR Part 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_x emission rates based on those procedures; or

(2) use CEMS or PEMS in accordance with this section to monitor NO_x emission rates.

(e) Auxiliary boilers. The owner or operator of each auxiliary boiler as defined in §117.10 of this title (relating to Definitions) shall:

(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 §117.213 of this title (relating to Continuous Demonstration of Compliance).

(f) PEMS requirements. The owner or operator of any PEMS used to meet a pollutant monitoring requirement of this section must comply with the following. The required PEMS and fuel flow meters shall be used to demonstrate continuous compliance with the emission limitations of §117.135 of this title (relating to Emission Specifications).

(1) The PEMS must predict the pollutant emissions in the units of the applicable emission limitations of this division.

(2) Monitor diluent, either oxygen or carbon dioxide:

(A) using a CEMS:

(i) in accordance with subsection (b) of this section; or

(ii) with a similar alternative method approved by the executive director and EPA; or

(B) using a PEMS.

(3) Any PEMS for units subject to the requirements of 40 CFR 75 shall meet the requirements of 40 CFR 75 Subpart E, §§75.40 - 75.48.

(4) Any PEMS for units not subject to the requirements of 40 CFR 75 shall meet the requirements of either:

(A) 40 CFR 75, Subpart E, §§75.40 - 75.48; or

(B) §117.213(f) of this title.

(g) Gas turbine monitoring. The owner or operator of each stationary gas turbine subject to the emission specifications of §117.135 of this title, instead of monitoring emissions in accordance with the monitoring requirements of 40 CFR 75, may comply with the following monitoring requirements:

(1) for stationary gas turbines rated less than 30 megawatt (MW) or peaking gas turbines (as defined in §117.10 of this title) which use steam or water injection to comply with the emission specification of §117.135(2) 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 shall be accurate to within ± 5.0%. The steam-to-fuel or water-to-fuel ratio monitoring data shall constitute the method for demonstrating continuous compliance with the emission specification of §117.135(2) of this title; and

(2) for gas turbines not subject to paragraph (1) of this subsection, install, calibrate, maintain and operate a CEMS or PEMS in compliance with this section.

(h) 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 which collects, sums, and stores electronic data from continuous fuel flow meters is an acceptable totalizer. The units are:

(1) any unit subject to the emission specifications of this division;

(2) any stationary gas turbine with an MW rating greater than or equal to 1.0 MW operated more than 850 hours per year (hr/yr); and

(3) any unit claimed exempt from the emission specifications of this division using the low annual capacity factor exemption of §117.133(1) of this title (relating to Exemptions).

(i) Run time meters. The owner or operator of any stationary gas turbine using the exemption of §117.133(2) of this title shall record the operating time with an elapsed run time meter approved by the executive director.

(j) Loss of exemption. The owner or operator of any unit claimed exempt from the emission specifications of this division using the low annual capacity factor exemptions of §117.133 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 §117.135 of this title shall be 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 shall include a schedule of increments of progress for the installation of the required control equipment.

(3) The schedule shall be subject to the review and approval of the executive director.

(k) Data used for compliance. After the initial demonstration of compliance required by §117.141 of this title (relating to Initial Demonstration of Compliance) the methods required in this section shall be used to determine compliance with the emission specifications of this division. Compliance with the emission limitations may also be determined at the discretion of the executive director using any commission compliance method.

(l) Enforcement of NO_x limits. No unit subject to §117.135 of this title shall be operated at an emission rate higher than that allowed by the emission specifications of §117.135 of this title.

§117.145. Final Control Plan Procedures.

(a) The owner or operator of units listed in §117.131 of this title (relating to Applicability) shall submit a final control report to show compliance with the requirements of §117.135 of this title (relating to Emission Specifications). The report must include:

(1) the section under which nitrogen oxides (NO_x) compliance is being established for the units within the electric generating system, either:

(A) §117.135 of this title; or

(B) §117.138 of this title (relating to System Cap);

(2) the methods of control of NO_x emissions for each unit;

(3) the emissions measured by testing required in §117.141 of this title (relating to Initial Demonstration of Compliance);

(4) the submittal date, and whether sent to the Austin or the regional office (or both), of any compliance stack test report or relative accuracy test audit report required by §117.141 of this title

which 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 §117.135 of this title.

(b) For sources complying with §117.138 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 system cap allowable emission rates;

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

(A) the average daily heat input $H_{\bar{}}$ specified in §117.138(c)(1) of this title;

(B) the maximum daily heat input $H_{m\bar{}}$ specified in §117.138(c)(2) of this title;

(C) the method of monitoring emissions; and

(D) the method of providing substitute emissions data when the NO_x monitoring system is not providing valid data; and

(3) an explanation of the basis of the values of $H_{\bar{}}$ and $H_{m\bar{}}$.

(c) The report must be submitted by the applicable date specified for final control plans in §117.512 of this title (relating to Compliance Schedule for Utility Electric Generation in East and Central Texas). 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 system cap rolling 30-day average emission limit, according to the applicable schedule given in §117.512 of this title.

§117.147. 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 shall adhere to the emission limits and the final compliance dates of this division (relating to Utility Electric Generation in East and Central Texas). The revision of the final control plan shall be subject to the review and approval of the executive director.

§117.149. Notification, Recordkeeping, and Reporting Requirements.

(a) Start-up and shutdown records. For units subject to the start-up and/or shutdown exemptions allowed under §101.11 of this title (relating to Exemptions from Rules and Regulations), hourly records shall be made of start-up and/or shutdown events and maintained for a period of at least two years. Records shall be available for inspection by the executive director, EPA, and any local air pollution control agency having jurisdiction upon request. These records shall 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 Utility Electric Generation in East and Central Texas) shall submit notification to the executive director as follows:

(1) verbal notification of the date of any initial demonstration of compliance testing conducted under §117.141 of this title (relating to Initial Demonstration of Compliance) at least 15 days prior to such date followed by written notification within 15 days after testing is completed; and

(2) verbal notification of the date of any continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) performance evaluation conducted under §117.143 of this title (relating to Continuous Demonstration of Compliance) at least 15 days prior to such date followed by written notification within 15 days after testing is completed.

(c) Reporting of test results. The owner or operator of an affected unit shall furnish the executive director and any local air pollution control agency having jurisdiction a copy of any initial demonstration of compliance testing conducted under §117.141 of this title or any CEMS or PEMS performance evaluation conducted under §117.143 of this title:

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

(2) not later than the appropriate compliance schedule specified in §117.512 of this title (relating to Compliance Schedule for Utility Electric Generation in East and Central Texas).

(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 §117.143 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 shall be postmarked or received by the 30th day following the end of each calendar semiannual period. Written reports shall include the following information:

(1) the magnitude of excess emissions computed in accordance with 40 Code of Federal Regulations (CFR), Part 60, §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;

(A) for stationary gas turbines using steam-to-fuel or water-to-fuel ratio monitoring to demonstrate compliance in accordance with §117.143 of this title, excess emissions are computed as each one-hour period during which 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 §117.141 of this title;

(B) For units complying with §117.138 of this title (relating to System Cap), excess emissions are each daily period for which the total nitrogen oxides (NO_x) emissions exceed the rolling 30-day average or the maximum daily NO_x cap;

(2) specific identification of each period of excess emissions that occurs during start-ups, 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 during which 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 shall 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") shall 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 operating time for the reporting period or the CEMS 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 operating time for the reporting period, a summary report and an excess emission report shall 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 shall be kept for a period of at least five years and made available for inspection by the executive director, EPA, or local air pollution control agencies having jurisdiction upon request. Operating records for each unit shall 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 shall include:

- (1) emission rates in units of the applicable standards;
- (2) gross energy production in MW-hr (not applicable to auxiliary boilers);
- (3) quantity and type of fuel burned;
- (4) the injection rate of reactant chemicals (if applicable);

and

(5) emission monitoring data, pursuant to §117.143 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 §117.141 of this title; and

(7) records of hours of operation.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

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Margaret Hoffman

Director, Environmental Law Division

Texas Natural Resource Conservation Commission

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For further information, please call: (512) 239-0348



Division 4. CEMENT KILNS

30 TAC §§117.260, 117.261, 117.265, 117.273, 117.279, 117.283

STATUTORY AUTHORITY

The new sections are proposed under the Texas Health and Safety Code, TCAA, §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

The proposed new sections implement the Texas Health and Safety Code, TCAA, §§382.011, 382.012, and 382.017.

§117.260. Cement Kiln Definitions.

Unless specifically defined in the Texas Clean Air Act (TCAA) or in the rules of the Texas Natural Resource Conservation Commission (commission), the terms used by the commission have the meanings commonly used in the field of air pollution control. In addition to the terms which are defined by the TCAA, the following terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §101.1 of this title (relating to Definitions), §3.2 of this title (relating to Definitions), and §117.10 of this title (relating to Definitions).

(1) Clinker - The product of a portland cement kiln from which finished cement is manufactured by milling and grinding.

(2) Long dry kiln - A kiln 400 feet or greater in length which employs no preheating of the dry feed. The inlet feed to the kiln is dry.

(3) Long wet kiln - A kiln 400 feet or greater in length which employs no preheating of the dry feed. The inlet feed to the kiln is a slurry.

(4) Portland cement - A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.

(5) Portland cement kiln - A system, including any solid, gaseous, or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce portland cement clinker.

(6) Precalciner kiln - A kiln where the feed to the kiln system is preheated in cyclone chambers and utilizes a second burner to calcine material in a separate vessel attached to the preheater before the final fusion in a kiln which forms clinker.

(7) Preheater kiln - A kiln where the feed to the kiln system is preheated in cyclone chambers before the final fusion in a kiln which forms clinker.

§117.261. Applicability.

This division (relating to Cement Kilns) applies to each portland cement kiln in Bexar, Comal, Ellis, Hayes, and McLennan Counties that was placed into service before December 31, 1999, except as specified in §117.265 and §117.283 of this title (relating to Emission Specifications; and Source Cap).

§117.265. Emission Specifications.

In accordance with the compliance schedule in §117.524 of this title (relating to Compliance Schedule for Cement Kilns), the owner or operator of each portland cement kiln shall ensure that nitrogen oxides (NO_x) emissions do not exceed the following rates on a 30-day rolling average:

- (1) for each long wet kiln, 6.0 pounds per ton (lbs/ton) of clinker produced;
- (2) for each long dry kiln, 5.1 lbs/ton of clinker produced;
- (3) for each preheater kiln, 3.8 lbs/ton of clinker produced; and
- (4) for each preheater-precalciner or precalciner kiln, 2.8 lbs/ton of clinker produced.

§117.273. Continuous Demonstration of Compliance.

(a) Nitrogen oxides (NO_x) monitors. In accordance with the compliance schedule in §117.524 of this title (relating to Compliance Schedule for Cement Kilns), the owner or operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS) to monitor kiln exhaust NO_x.

(b) CEMS requirements. The owner or operator of any CEMS used to meet the monitoring requirement of subsection (a) of this section must comply with the following.

(1) The CEMS shall meet the requirements of 40 Code of Federal Regulations (CFR), Part 60 as follows:

(A) §60.13;

(B) Appendix B, Performance Specification 2, for NO_x; and

(C) audits shall be in accordance with §5.1 of Appendix F, quality assurance procedures, except that a cylinder gas audit or relative accuracy audit may be performed in lieu of the annual relative accuracy test audit (RATA) required in §5.1.1.

(2) One CEMS may be shared among kilns, provided:

(A) the exhaust stream of each kiln is analyzed separately; and

(B) the CEMS meets the certification requirements of paragraph (1) of this subsection for each exhaust stream.

(3) The CEMS shall be subject to the approval of the executive director.

(c) PEMS requirements. The owner or operator of any PEMS used to meet the monitoring requirement of subsection (a) of this section must comply with the following.

(1) The PEMS must predict the NO_x emissions in the units of the applicable emission limitations of this division.

(2) The PEMS shall meet the requirements of §117.213(f)(2) - (7) of this title (relating to Continuous Demonstration of Compliance).

§117.279. Notification, Recordkeeping, and Reporting Requirements.

(a) Notification. The owner or operator of each portland cement kiln shall submit verbal notification to the executive director of the date of any continuous emissions monitoring system (CEMS) or predictive emissions monitoring system (PEMS) performance evaluation conducted under §117.273 of this title (relating to Continuous Demonstration of Compliance) at least 15 days before such date followed by written notification within 15 days after testing is completed.

(b) Reporting of test results. The owner or operator of each portland cement kiln shall furnish the executive director and any local air pollution control agency having jurisdiction a copy of any CEMS or PEMS relative accuracy test audit (RATA) conducted under §117.273 of this title:

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

(2) not later than May 1, 2003.

(c) Recordkeeping. The owner or operator of a portland cement kiln subject to the requirements of this division shall maintain written or electronic records of the data specified in this subsection. Such records shall be kept for a period of at least five years and shall be made available upon request by authorized representatives of the executive director, EPA, or local air pollution control agencies having jurisdiction. The records shall include:

(1) for each kiln, monitoring records of:

(A) daily nitrogen oxides (NO_x) emissions (in pounds (lbs));

(B) daily production of clinker (in tons); and

(C) average NO_x emission rate (in lbs/ton of clinker produced) on the basis of a 30-day rolling average;

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

(3) records of the results of any stack testing conducted.

§117.283. Source Cap.

(a) As an alternative to complying with the nitrogen oxides (NO_x) emission limits of §117.265 of this title (relating to Emission Specifications) in Bexar, Comal, Hayes, and McLennan Counties, an owner or operator may reduce total NO_x emissions (in tons per day (tpd)) from all cement kilns at the account (including any cement kilns placed into service on or after December 31, 1999) to at least 30% less than the total NO_x emissions (in tpd) from all cement kilns in the account's 1997 emissions inventory (EI).

(b) To qualify for the source cap option available under this section, the owner or operator must submit an initial control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of NO_x emissions from all cement kilns at the account will be at least 30% from the 1997 baseline EI. Each control plan must be approved by the executive director before the owner or operator may use the source cap available under this section for compliance. At a minimum, the control plan shall include the emission point number (EPN), facility identification number (FIN), and 1997 baseline EI NO_x emissions (in tpd) from each cement kiln at the account; a description of the control measures which have been or will be implemented at each cement kiln; and an explanation of the recordkeeping procedure and calculations which will be used to demonstrate compliance.

(c) Beginning in 2004, the owner or operator shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of NO_x emissions from all cement kilns at the account will be at least 30% from the 1997 baseline EI. Each control plan must be approved by the executive director before the owner or operator may use the source cap available under this section for compliance. At a minimum, the report shall include the EPN, FIN, and NO_x emissions

(in tpd) from each cement kiln at the account in the preceding year's EI.

(d) All representations in control plans and annual reports become enforceable conditions. The owner or operator shall not vary from such representations if the variation will cause a change in the identity of the specific cement kilns subject to this section or the method of control of emissions unless the owner or operator submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction no later than 30 days after the change. All control plans and reports shall demonstrate that the total NO_x emissions (in tpd) from all cement kilns at the account (including any cement kilns placed into service on or after December 31, 1999) are being reduced to at least 30% less than the total NO_x emissions (in tpd) from all cement kilns in the account's 1997 EI.

(e) All emission rates shall be calculated in a manner consistent with the 1997 emissions inventory.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

Filed with the Office of the Secretary of State, on December 20, 1999.

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Margaret Hoffman
Director, Environmental Law Division
Texas Natural Resource Conservation Commission
Proposed date of adoption: April 19, 2000
For further information, please call: (512) 239-0348



Subchapter E. ADMINISTRATIVE PROVISIONS

30 TAC §117.512, §117.524

STATUTORY AUTHORITY

The new sections are proposed under the Texas Health and Safety Code, TCAA, §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.017, concerning Rules, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; and §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air, such as the SIP.

The proposed new sections implement the Texas Health and Safety Code, TCAA, §§382.011, 382.012, and 382.017.

§117.512. Compliance Schedule for Utility Electric Generation in East and Central Texas.

The owner or operator of each utility electric power boiler or stationary gas turbine 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, and Wharton Counties shall comply with the requirements of Subchapter B, Division 2 of this chapter (relating to Utility Electric Generation in East and Central Texas) as soon as practicable, but no later than May 1, 2003.

§117.524. Compliance Schedule for Cement Kilns.

The owner or operator of each portland cement kiln which was placed into service before December 31, 1999 in Bexar, Comal, Ellis, Hayes, and McLennan Counties shall be in compliance with the requirements of Subchapter B, Division 4 of this chapter (relating to Cement Kilns) as soon as practicable, but no later than May 1, 2003.

This agency hereby certifies that the proposal has been reviewed by legal counsel and found to be within the agency's legal authority to adopt.

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Chapter 117. CONTROL OF AIR POLLUTION FROM NITROGEN COMPOUNDS

The Texas Natural Resource Conservation Commission (TNRCC or commission) proposes amendments to §§117.101, 117.103, 117.105, 117.107, 117.111, 117.113, 117.115, 117.117, 117.119, and 117.121, concerning Utility Electric Generation; §§117.201, 117.203, 117.205, 117.207, 117.208, 117.209, 117.211, 117.213, 117.215, 117.217, 117.219, 117.221, and 117.223, concerning Commercial, Institutional and Industrial Sources; and §§117.510, 117.520 and 117.570, concerning Administrative Provisions. The commission also proposes new §§117.104, 117.106, 117.108, 117.116, 117.206, and 117.216, concerning Combustion at Existing Major Sources. In addition, the commission proposes to repeal §117.109, concerning Initial Control Plan Procedures, and §117.601, concerning Gas-Fired Steam Generation. The proposed changes to Chapter 117 and to the State Implementation Plan (SIP) would require certain electric utility and industrial, commercial, and institutional (ICI) boilers in the Beaumont/Port Arthur (BPA) and Dallas/Fort Worth (DFW) ozone nonattainment areas to meet new emission specifications and other requirements in order to reduce nitrogen oxides (NO_x) emissions and ozone air pollution. The changes would also require certain process heaters in BPA and lean-burn engines in DFW to meet new emission specifications and other requirements in order to reduce NO_x emissions and ozone air pollution. The commission proposes these amendments to Chapter 117, concerning Control of Air Pollution from Nitrogen Compounds, and to the SIP as essential components of and consistent with the SIP that Texas is required to develop under Federal Clean Air Act (FCAA), §110 to demonstrate attainment of the National Ambient Air Quality Standard (NAAQS) for ozone.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES: BPA

The BPA ozone nonattainment area, an area defined by Hardin, Jefferson, and Orange Counties, is currently designated moderate under the FCAA and thus was required to attain the one-hour ozone standard by November 15, 1996. BPA did not attain the standard by that date and also did not attain the standard by November 15, 1999, the attainment date for serious areas.