

The Texas Commission on Environmental Quality (commission) proposes amendments to §§117.260, 117.265, 117.279, and 117.283, concerning Cement Kilns; and §117.524 and §117.570, concerning Administrative Provisions; and corresponding revisions to the state implementation plan (SIP).

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

On April 19, 2000 the commission adopted rules, which were published in the May 5, 2000 issue of the *Texas Register* (25 TexReg 4101), as part of the SIP control strategy for the Dallas/Fort Worth (DFW) ozone nonattainment area to achieve attainment with the national ambient air quality standard (NAAQS) for ozone. The adopted rules required portland cement kilns in Bexar, Comal, Ellis, Hays, and McLennan Counties to meet specific nitrogen oxides (NO<sub>x</sub>) emission limits.

Under the adopted rules, owners or operators of cement kilns were given several options to meet the emission requirements in Chapter 117. Specifically, owners or operators of cement kilns have the option of complying with the emission limits on the basis of a weighted average if there are multiple kilns at the same account that are subject to the same limit. Also, owners or operators of wet-process cement kilns have a technology option in which compliance is through installation of low-NO<sub>x</sub> burners and mid-kiln firing. Finally, owners or operators of cement kilns have the option of complying through a source cap which requires NO<sub>x</sub> emission reductions of at least 30% from the total NO<sub>x</sub> emissions from all cement kilns in the account's 1996 emissions inventory, on a 30-day rolling average basis.

The purpose of this proposal is to give the owners and operators of cement kilns in the affected areas additional flexibility in meeting their NO<sub>x</sub> reduction requirements through either the use of a technology option (for dry-process cement kilns) or emission reduction credits. In addition, owners and operators of wet-process kilns could, in lieu of mid-kiln firing, use some other form of secondary combustion which achieves equivalent levels of NO<sub>x</sub> reductions, or could make other additions or changes to the kiln system which achieve at least a 30% reduction in NO<sub>x</sub> emissions. Finally, owners and operators would be able to use a 365-day rolling average for determination of compliance in lieu of the current 30-day rolling average.

The proposed amendments to the Chapter 117 cement kiln rules would modify the existing rules and result in a similar level of emission reductions. Therefore, the NO<sub>x</sub> reductions previously claimed in the DFW Attainment Demonstration SIP would, as a result of this rulemaking, be achieved through alternate, but equivalent, Chapter 117 rules. Additionally, the flexibility in these proposals would settle a lawsuit filed by two cement kiln companies challenging the adoption of the original cement kiln rules. If this lawsuit is settled, compliance by the regulated community is more likely, thus providing more certainty that emission reductions needed for the SIP would actually occur.

In addition, the proposed amendments to Chapter 117 and revisions to the SIP would improve implementation of Chapter 117 by correcting typographical errors, deleting unnecessary section title references, clarifying ambiguous language, and deleting obsolete language.

#### SECTION BY SECTION DISCUSSION

The proposed amendment to §117.260, concerning Cement Kiln Definitions, would revise a reference to the Texas Natural Resource Conservation Commission (the commission's former name) for consistency with the agency's style guidelines, delete unnecessary section title references, and add definitions of indirect-firing system, low-NO<sub>x</sub> precalciner, and secondary combustion. Subsequent definitions are renumbered to accommodate the new definitions.

The proposed amendment to §117.260 would also revise the definition of long dry kiln and long wet kiln firing to delete references to the kiln length because the appropriate criterion is whether or not the inlet feed to the kiln is a slurry; i.e., the kiln length is irrelevant to this determination. In addition, the proposed amendment to §117.260 would revise the definition of low-NO<sub>x</sub> burner to include design criteria for dry-process kilns.

Finally, the proposed amendment to §117.260 would revise the definition of mid-kiln firing to clarify that this term is applicable to long wet kilns and long dry kilns, and would add the phrase "or to" in order to clarify that solid fuel can be delivered to an intermediate point in the kiln either vertically through the kiln wall or horizontally from the end of the kiln.

The proposed amendment to §117.265, concerning Emission Specifications, would revise the averaging period for the NO<sub>x</sub> emission specifications in §117.265(a) from a 30-day rolling average to a 365-day rolling average.

The proposed amendment to §117.265 would also clarify that the existing technology option of §117.265(c) is applicable to long wet kilns and long dry kilns. In addition, the proposed amendment to §117.265(c) would add flexibility by allowing owners and operators of wet-process kilns, in lieu of mid-kiln firing, to use some other form of secondary combustion which achieves equivalent levels of NO<sub>x</sub> reductions, or to make other additions or changes to the kiln system which achieve at least a 30% reduction in NO<sub>x</sub> emissions.

The proposed amendment to §117.265 would also add §117.265(d), which establishes a technology option for preheater kilns and precalciner kilns.

Finally, the proposed amendment to §117.265 would add §117.265(e), which specifies that emission reduction credits may be used to meet the NO<sub>x</sub> control requirements in accordance with §117.570, concerning Use of Emissions Credits for Compliance.

The proposed amendment to §117.279, concerning Notification, Recordkeeping, and Reporting Requirements, would revise §117.279(c)(1) from a 30-day averaging period to a 365-day averaging period for consistency with the proposed revisions to §117.265(a).

The proposed amendment to §117.283, concerning Source Cap, would revise §117.283(a) - (d) from a 30-day averaging period to a 365-day averaging period for consistency with the proposed revisions to §117.265(a). In addition, the proposed amendment to §117.283(a) would specify that only hourly emissions data on or after the compliance date is included in determining compliance with the source cap. The proposed amendment to §117.283 would also specify that for sources opting to use the source cap, the initial control plan is due by December 31 of the year preceding the final compliance date specified in §117.524, concerning Compliance Schedule for Cement Kilns.

The proposed amendment to §117.524 would add §117.524(b), which extends the compliance schedule until six months after the issuance of the permit for operation of a low NO<sub>x</sub> burner and 12 months after issuance of the permit for operation of a secondary combustion system for cement kilns in Ellis County, provided that the owner or operator has filed an application for modification of its facility to meet the requirements of 30 TAC Chapter 117, Subchapter B, Division 4 within two months after the effective date of §117.524(b). This is necessary due to the possibility of a hearing request on the permit application amendment, which could delay the implementation of NO<sub>x</sub> control measures. The compliance date extension is limited to permit applications concerning only those modifications necessary to comply with the NO<sub>x</sub> control requirements of this division.

The proposed amendment to §117.570 would add §§117.135, 117.265, and 117.283 to the sections listed in §117.570(a) for which emission reduction credits may be used for compliance. The addition of §117.265 and §117.283 is necessary for consistency with proposed §117.265(e) and §117.283(f), and the addition of §117.135 corrects an inadvertent omission in previous rulemaking and is necessary to allow electric generating facilities in east and central Texas to use emission reduction credits for compliance. The proposed amendment to §117.570 also corrects typographical errors in the definitions of the variables ER<sub>OLD</sub> and ER<sub>NEW</sub> in the figure in §117.570(d).

#### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

John Davis, 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 would be no significant fiscal implications for units of state and local government as a result of administration or enforcement of the proposed amendments.

There are no fiscal implications for units of state and local government due to compliance with the proposed amendments because there are no cement kilns owned by state or local units of government. All of the sources which would have to comply with the proposed rules are currently subject to Chapter 117 and air permits, and are already being inspected for compliance. Consequently, no additional facilities would need to be inspected for compliance with the proposed amendments. The commission

anticipates that enforcement of these rules would not change the number of facilities currently inspected by the state and local governments.

#### PUBLIC BENEFITS AND COSTS

Mr. Davis also determined that for each year of the first five years the proposed amendments are in effect, the public benefit anticipated from enforcement of and compliance with the proposed amendments would be the potential for reduced costs and increased flexibility for cement kilns to meet emission reduction requirements. The proposed rules would allow owners and operators of cement kilns in Bexar, Comal, Ellis, Hays, and McLennan Counties additional flexibility in meeting their NO<sub>x</sub> reduction requirements through either the use of a technology option (for dry-process cement kilns) or emission reduction credits. In addition, owners and operators of wet-process kilns could, in lieu of mid-kiln firing, use some other form of secondary combustion which achieves equivalent levels of NO<sub>x</sub> reductions, or could make other additions or changes to the kiln system which achieve at least a 30% reduction in NO<sub>x</sub> emissions. Finally, owners and operators would be able to use a 365-day rolling average for determination of compliance in lieu of the current 30-day rolling average.

A detailed estimate of the cost of complying with the current cement kiln requirements is given in the PUBLIC BENEFITS AND COSTS section of the preamble to the Chapter 117 rulemaking which was published in the December 31, 1999 and January 14, 2000 issues of the *Texas Register* (24 TexReg 11959 and 25 TexReg 308). If the proposed revisions are adopted, there could be cost savings for owners and operators. In the event that the current cement kiln requirements are retained, however, there would be no additional costs to owners and operators beyond those described in the December 31, 1999 and January 14, 2000 issues of the *Texas Register*.

#### SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

No adverse fiscal implications are anticipated for small or micro-businesses as a result of implementation of the proposed amendments because none of the cement kilns subject to the proposed revisions are small or micro-businesses. In the previous December 31, 1999 and January 14, 2000 issues of the *Texas Register*, the commission could not identify any small or micro-businesses that

would be affected by the proposed amendments.

Likewise, the commission has been unable to identify any small or micro-businesses which would be affected by the proposed amendments in this rulemaking. The cement kilns affected by the proposed amendments are large industrial businesses. As noted previously in this preamble, there could be cost savings if the proposed revisions are adopted. Regardless, no adverse fiscal implications are anticipated for small and micro-businesses as a result of implementing the proposed amendments.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

#### DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

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 does not meet the definition of a “major environmental rule” as defined in that statute. A “major environmental rule” means a rule, the specific intent of which, is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

The commission is proposing the amendments to Chapter 117 and revisions to the SIP to allow greater flexibility for cement kilns in the affected counties to meet NO<sub>x</sub> emission limitations. The proposed amendments do not 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; therefore, these proposed amendments do not constitute a major environmental rule. The amendments would provide flexibility to the regulated community to allow new options for compliance while still achieving the reductions needed to achieve and maintain attainment in east and central Texas.

In addition, Texas Government Code, §2001.0225, only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking is not subject to the regulatory analysis provisions of §2001.0225(b), because the proposed rules do not meet any of the four applicability requirements. Specifically, the cement kiln requirements were developed in order to meet the ozone NAAQS set by the United States Environmental Protection Agency (EPA) under the Federal Clean Air Act (FCAA), §109 (42 United States Code (USC), §7409), and therefore meet a federal requirement. Provisions of 42 USC, §7410, require states to adopt a SIP which provides for “implementation, maintenance, and enforcement” of the primary NAAQS in each air quality control region of the state. This rule would provide flexibility to help ensure that the reductions needed are actually accomplished. The rulemaking does 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 rulemaking was not developed solely under the general powers of the agency, but was specifically developed to meet the NAAQS established under federal law and authorized under Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.016, 382.017, and 382.051(d), as well as under 42 USC, §7410(a)(2)(A). The commission invites public comment on the draft regulatory impact analysis.

#### TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact analysis for the proposed rules under Texas Government Code, §2007.043. The specific purposes of this rulemaking are to allow greater flexibility for cement kilns in the affected counties to meet NO<sub>x</sub> emission limitations, achieve reductions in ozone formation in the DFW ozone nonattainment area, help bring DFW into compliance with the air quality standards established under federal law as NAAQS for ozone, and maintain air quality in east and central Texas. Promulgation and enforcement of the rules would not burden private real property. The proposed rulemaking does not affect private property in a manner which restricts or limits an owner's right to the

property that would otherwise exist in the absence of a governmental action. Consequently, the proposed rulemaking does not meet the definition of a takings under Texas Government Code, §2007.002(5). Although the proposed rulemaking does not directly prevent a nuisance or prevent an immediate threat to life or property, it does prevent a real and substantial threat to public health and safety, and partially fulfills a federal mandate under USC, §7410. Specifically, the emission limitations and control requirements within this proposal were developed in order to meet the ozone NAAQS set by the EPA under USC, §7409. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once the EPA has established them. Under USC, §7410 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 the rulemaking is to implement a NO<sub>x</sub> strategy which is necessary for the DFW area to meet the air quality standards established under federal law and to maintain air quality in east and central Texas. Consequently, the exemption which applies to this rulemaking is that of an action reasonably taken to fulfill an obligation mandated by federal law. Therefore, these proposed rules would not constitute a takings under Texas Government Code, Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the proposal is a rulemaking identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11 and therefore, will require that applicable goals and policies of the Coastal Management Program (CMP) be considered during the rulemaking process.

The commission prepared a preliminary consistency determination for the proposed rules under 31 TAC §505.22 and found that the proposed rulemaking is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(1)). No new sources of air contaminants would be authorized as a result of these proposed rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with regulations in 40 Code of Federal Regulations (CFR), to protect and enhance air quality in the

coastal area (31 TAC §501.14(q)). This rulemaking action complies with 40 CFR. Therefore, in compliance with 31 TAC §505.22(e), this rulemaking action is consistent with CMP goals and policies. The commission seeks public comment on the consistency of the proposed rule amendments with applicable CMP goals and policies.

#### EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMIT PROGRAM

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

#### ANNOUNCEMENT OF HEARINGS

The commission will hold public hearings on this proposal in Arlington on December 5, 2002 at 1:30 p.m., North Central Texas Council of Governments, Suite 200, located at 616 Six Flags Drive; and in Austin on December 9, 2002, at 1:30 p.m., Texas Commission on Environmental Quality, 12100 Park 35 Circle, Building F, Room 2210. The hearings are structured for the receipt of oral or written comments by interested persons. Registration will begin 30 minutes prior to each hearing. Individuals may present oral statements when called upon in order of registration. Open discussion will not occur during each hearing; however, commission staff members will be available to discuss the proposal 30 minutes before each hearing, and will answer questions before and after each hearing.

Persons with disabilities who have special communication or other accommodation needs, who are planning to attend a hearing, 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 Patricia Durón, Office of Environmental Policy, Analysis, and Assessment, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. Comments must be received by 5:00 p.m., December 9, and should reference Rule Log Number 2002-

070b-117-AD. For further information, please contact Debra Barber at (512) 239-0412 or Eddie Mack at (512) 239-1488.

## **SUBCHAPTER B: COMBUSTION AT MAJOR SOURCES**

### **DIVISION 4: CEMENT KILNS**

#### **§§117.260, 117.265, 117.279, 117.283**

#### **STATUTORY AUTHORITY**

The amendments are proposed under Texas Water Code (TWC), §5.103, which provides the commission the authority to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), TCAA, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA. The amendments are also proposed under TCAA, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; and §382.051(d), concerning Permitting Authority of Commission; Rules, which authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under TCAA, Chapter 382; and FCAA, 42 USC, §7401.

The proposed amendments implement TCAA, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.051(d); and TWC, §5.103.

#### **§117.260. Cement Kiln Definitions.**

Unless specifically defined in the Texas Clean Air Act (TCAA) or in the rules of the commission [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 §§3.2, 101.1, and 117.10 [§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) (No change.)

(2) **Indirect-firing system** -- A system which reduces the amount of primary air used in a cement kiln by:

(A) separating the powdered fuel from the air stream that carries the fuel from the drying/milling equipment;

(B) storing the fuel briefly; and

(C) using an independent, significantly smaller stream of hot primary air to blow the fuel to the burner.

(3) [(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.

(4) [(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.

(5) [(4)] **Low-NO<sub>x</sub> burner [burners]** -- Either of the following:

(A) for long wet kilns, combustion [Combustion] equipment designed to reduce flame turbulence, delay fuel/air mixing, and establish fuel-rich zones for initial combustion; or[.]

(B) a type of cement kiln burner that results in decreasing nitrogen oxides (NO<sub>x</sub>) emissions and which has an indirect-firing system and a series of channels or orifices that:

(i) allow for the adjustment of the volume, velocity, pressure, and direction of the air carrying the fuel (known as primary air) and the combustion air (known as secondary air) into the kiln; and

(ii) impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.

(6) **Low-NO<sub>x</sub> precalciner** -- A process in which a portion of the fuel is injected near the raw material feed end of a preheater or precalciner kiln, resulting in a reducing atmosphere in the preheater or precalciner.

(7) [(5)] **Mid-kiln firing** -- Secondary combustion in long dry or long wet kilns by injecting solid fuel at (or to) an intermediate point in the kiln using a specially-designed feed injection mechanism for the purpose of decreasing NO<sub>x</sub> [nitrogen oxides (NO<sub>x</sub>)] emissions through:

(A) burning part of the fuel at a lower temperature; and

(B) reducing conditions at the solid fuel injection point that may destroy some of the NO<sub>x</sub> formed upstream in the kiln burning zone.

(8) [(6)] **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.

(9) [(7)] **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.

(10) [(8)] **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.

(11) [(9)] **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.

(12) **Secondary combustion** -- A system that employs a second combustion point in addition to the primary flame. This definition includes mid-kiln firing in long dry and long wet kilns, and also additional combustion at the raw material feed end of the kiln in preheater-precincer kilns.

#### **§117.265. Emission Specifications.**

(a) 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<sub>x</sub>) emissions do not exceed the following rates on a 365-day [30-day] rolling average. For the purposes of this section, the 365-day rolling average is calculated as the total of all the hourly emissions data (in pounds) that fuel was combusted in a cement kiln in the preceding 365 consecutive days, divided by the total number of tons of clinker produced in that kiln during the same 365-day period: [For the purposes of this section, a 30-day rolling average is an average, calculated for each day that fuel is combusted in a cement kiln, of all the hourly emissions data for the preceding 30-days that fuel was combusted in the kiln:]

(1) - (4) (No change.)

(b) (No change.)

(c) Each long wet or long dry kiln for which the following controls [low-NO<sub>x</sub> burners and mid-kiln firing] are installed and operated during kiln operation is not required to meet the NO<sub>x</sub> emission limits of subsection (a) of this section, provided that each [. Each] owner or operator choosing this

option submits [shall submit] written notification of this choice to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction before the appropriate compliance date in §117.524 of this title.

(1) a low-NO<sub>x</sub> burner and either:

(A) mid-kiln firing, or

(B) some other form of secondary combustion achieving equivalent levels of NO<sub>x</sub> reductions; or alternatively,

(2) other additions or changes to the kiln system achieving at least a 30% reduction in NO<sub>x</sub> emissions, provided the additions or changes are approved by the executive director with concurrence from EPA.

(d) Each preheater or precalciner kiln for which either a low-NO<sub>x</sub> burner or a low-NO<sub>x</sub> precalciner is installed and operated during kiln operation is not required to meet the NO<sub>x</sub> emission limits of subsection (a) of this section. Each owner or operator choosing this option shall submit written notification of this choice to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction before the appropriate compliance date in §117.524 of this title.

(e) An owner or operator may use §117.570 of this title (relating to Use of Emissions Credits for Compliance) to meet the NO<sub>x</sub> emission control requirements of this section, in whole or in part.

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

(a) (No change.)

(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) - (2) (No change.)

(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 and rolling 365-day average nitrogen oxides (NO<sub>x</sub>) emissions (in pounds (lbs));

(B) daily and rolling 365-day average production of clinker (in tons); and

(C) average NO<sub>x</sub> emission rate (in lbs/ton of clinker produced) on the basis of a [30-day] rolling 365-day average;

(2) - (3) (No change.)

**§117.283. Source Cap.**

(a) As an alternative to complying with the requirements of §117.265 of this title (relating to Emission Specifications) in Bexar, Comal, Ellis, Hays, and McLennan Counties, an owner or operator may reduce total nitrogen oxides (NO<sub>x</sub>) emissions [(in pounds per day (ppd))] 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 annual NO<sub>x</sub> emissions (in tons [ppd]) from all cement kilns in the account's 1996 emissions inventory (EI), on a 365-day [30-day] rolling average basis. For the purposes of this section, the 365-day rolling average is calculated as the total of all the hourly emissions data for the preceding 365 days. For the calendar year which includes the appropriate compliance date in §117.524 of this title (relating to Compliance Schedule for Cement Kilns), only hourly emissions data on or after that compliance date is included, such that the first 365-day period ends one year after the appropriate compliance date in §117.524 of this title. [For the purposes of this section, a 30-day rolling average is an average, calculated for each day that fuel is combusted in a cement kiln, of all the hourly emissions data for the preceding 30-days that fuel was combusted in the kiln.] A 365-day [30-day] rolling average emission cap shall be calculated using the following equation.

**Figure: 30 TAC §117.283(a)**

**[Figure: 30 TAC §117.283(a)]**

$$\text{NO}_x \text{ 365-day rolling average emission cap (tons)} = 0.7 \sum_{i=1}^N R_i$$

Where:

- $i$  = Each cement kiln at a single account
- $N$  = The total number of cement kilns at the account
- $R_i$  = The kiln's annual [ozone season daily] NO<sub>x</sub> emission rate (in tons [ppd]) reported in the account's 1996 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<sub>x</sub> emissions from all cement kilns at the account will be at least 30% from the 1996 baseline EI on a 365-day rolling average basis. The plan shall be submitted no later than December 31 of the year

preceding the appropriate compliance date in §117.524 of this title. 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 1996 baseline EI NO<sub>x</sub> emissions (in tons [ppd]) 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 on March 31 of the year following the appropriate compliance date in §117.524 of this title [(relating to Compliance Schedule for Cement Kilns)], 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<sub>x</sub> emissions from all cement kilns at the account is [will be] at least 30% from the 1996 baseline EI on a 365-day rolling average basis. At a minimum, the report shall include the EPN, FIN, and each 365-day [the highest 30-day] rolling average NO<sub>x</sub> emissions (in tons [ppd]) during the preceding calendar year for the cement kilns at the account.

(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<sub>x</sub> emissions (in tons [ppd]) 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<sub>x</sub> emissions (in tons [ppd]) from all cement kilns in the account's 1996 EI on a 365-day rolling average basis.

(e) (No change.)

(f) An owner or operator may use §117.570 of this title (relating to Use of Emissions Credits for Compliance) to meet the NO<sub>x</sub> emission control requirements of this section, in whole or in part.

## **SUBCHAPTER E: ADMINISTRATIVE PROVISIONS**

### **§117.524, §117.570**

#### **STATUTORY AUTHORITY**

The amendments are proposed under TWC, §5.103, which provides the commission the authority to adopt rules necessary to carry out its powers and duties under the TWC; and under THSC, TCAA, §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA. The amendments are also proposed under TCAA, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; and §382.051(d), concerning Permitting Authority of Commission; Rules, which authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under TCAA, Chapter 382; and FCAA, 42 USC, §7401.

The proposed amendments implement TCAA, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.051(d); and TWC, §5.103.

#### **§117.524. Compliance Schedule for Cement Kilns.**

(a) The owner or operator of each portland cement kiln which was placed into service before December 31, 1999 in Bexar, Comal, Ellis, Hays, 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 the following dates:

- (1) May 1, 2003 for cement kilns in Ellis County; and

(2) May 1, 2005 for cement kilns in Bexar, Comal, Hays, and McLennan Counties.

(b) Notwithstanding subsection (a)(1) of this section, for a cement kiln in Ellis County for which the owner or operator has filed an application for modification of its facility to meet the requirements of Subchapter B, Division 4 of this chapter within two months after the effective date of this subsection, the compliance schedule is extended until six months after the issuance of the permit for operation of a low NO<sub>x</sub> burner and 12 months after issuance of the permit for operation of a secondary combustion system. Such application(s) shall relate only to those modifications required to comply with Subchapter B, Division 4 of this chapter, and any issues incident thereto.

**§117.570. Use of Emissions Credits for Compliance.**

(a) An owner or operator of a unit not subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program) may meet emission control requirements of §117.105 or §117.205 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)), §117.106 or §117.206 of this title (relating to Emission Specifications for Attainment Demonstrations), §117.107 of this title (relating to Alternative System-wide Emission Specifications), §117.207 of this title (relating to Alternative Plant-wide Emission Specifications), §117.223 or §117.283 of this title (relating to Source Cap), or §§117.135, 117.265, or 117.475 [§117.475] of this title (relating to Emission Specifications) in whole or in part, by obtaining an emission reduction credit (ERC), mobile emission reduction credit (MERC), discrete emission reduction credit (DERC), or mobile discrete emission reduction credit (MDERC) in accordance with Chapter 101, Subchapter H, Division 1 or 4 of this title (relating to Emission Credit Banking and Trading; and Discrete Emission Credit Banking and Trading), unless there are federal or state regulations or permits under the same commission account number which contain a condition or conditions precluding such use.

(b) - (c) (No change.)

(d) Any lower nitrogen oxides (NO<sub>x</sub>) [NO<sub>x</sub>] emission specification established under this chapter for the unit or units using RCs shall require the user of the RCs to obtain additional RCs in accordance with Chapter 101, Subchapter H, Division 1 or 4 of this title and/or otherwise reduce emissions prior to the effective date of such rule change. For units using RCs in accordance with this section which are subject to new, more stringent rule limitations, the owner or operator using the RCs shall submit a revised final control plan to the executive director in accordance with §117.117 or §117.217 of this title (relating to Revision of Final Control Plan) to revise the basis for compliance with the emission specifications of this chapter. The owner or operator using the RCs shall submit the revised final control plan as soon as practicable, but no later than 90 days prior to the effective date of the new, more stringent rule. The owner or operator of the unit(s) currently using RCs shall calculate the necessary emission reductions per unit as follows.

**Figure: 30 TAC §117.570(d)**

**[Figure: 30 TAC §117.570(d)]**

$$\Delta E = \left[ LA \times (ER_{old} - ER_{new}) \times \frac{d}{2000} \right]$$

Where:

$\Delta E$  = the differential of emissions

$LA$  = the maximum level of activity

$ER_{old}$  [HEROLD] = the existing NO<sub>x</sub> emission rate for the affected in lb per unit of activity

$ER_{new}$  [ERNE] = the new NO<sub>x</sub> emission rate for the affected unit in lb per unit of activity

$d$  = (i) to calculate annual emission reductions,  $d = 365$   
(ii) to calculate emission reductions for the remainder of a control period,  $d =$  the number of days remaining in the control period