Eastern Kern Air Pollution Control District

Rule 425.3
PORTLAND CEMENT KILNS
(OXIDES OF NITROGEN)

FINAL STAFF REPORT

November 13, 2024

Prepared by

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I. INTRODUCTION

Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen) was amended by the Eastern Kern Air Pollution Control District (District) Governing Board on November 13, 2024, at its regular Board Meeting held in the District Board Room located at 414 W. Tehachapi Blvd., Suite D, Tehachapi, CA 93561.

Amended Rule 425.3 became effective and enforceable upon adoption. A copy of the Rule has been submitted to the California Air Resources Board (CARB) for their review and to be forwarded to the U.S. Environmental Protection Agency (EPA) for inclusion into the State Implementation Plan (SIP).

Rule 425.3 was originally adopted October 13, 1994, to set emissions standards for nitrogen oxides (NOx) produced by cement kilns to levels consistent with Reasonably Available Control Technology (RACT), and to satisfy the 1990 Federal Clean Air Act (FCAA). Rule 425.3 has been amended to address deficiencies the U.S Environmental Protection Agency (EPA) identified in the March 8, 2018, amendment.

Appendix A: Amended Rule 425.3, Portland Cement Kilns (NOx).

Appendix B: Strikeout underline edits Rule 425.3, Portland Cement Kilns (NOx).

Appendix C: Response to Comments.

II. BACKGROUND

NOx is a precursor pollutant, that when emitted, can photochemically react with volatile organic compounds (VOCs) in the atmosphere and form ground-level ozone. High levels of ground-level ozone can result in significant negative impacts to human health and the environment. Areas within the United States are given classification levels based on the concentrations of regulated air pollutants. Sections 182(b)(2) and (f) of the FCAA require ozone nonattainment areas classified as “Moderate” or above to submit State Implementation Plan (SIP) provisions that implement RACT. Specifically, RACT is required for volatile organic compound (VOC) sources that are subject to Control Techniques Guidelines (CTGs) and for all major stationary sources of ozone precursors (NOx or VOC).

The District has jurisdiction over the Eastern Kern ozone nonattainment area (eastern portions of Kern County, excluding Indian Wells Valley). Although Portland Cement Kilns are considered major sources of NOx emissions there are no CTGs applicable to them. However, Portland cement manufacturing facilities are still required to implement RACT-level controls. Therefore, on October 13, 1994, the District adopted Rule 425.3 to limit NOx emissions resulting from the operation of existing Portland Cement Kilns. The EPA approved Rule 425.3 and included it into the SIP on July 20, 1999 (64 FR 38832).

On March 27, 2008 (73 FR 16435), the EPA revised the primary ozone National Ambient Air Quality Standard (NAAQS) from 0.084 parts per million (ppm) to 0.075 ppm. On May 11, 2017, the District adopted its RACT demonstration for the 2008, 8-hour ozone NAAQS (2017 RACT SIP) and submitted it to the EPA on August 9, 2017. The District's ozone nonattainment area was classified as "Moderate" at the time of submittal and, therefore, EPA evaluated the submittal based on that classification. Currently, the District's ozone nonattainment area is classified as "Severe" for the 2008, 8-hour ozone NAAQS.

The District identified Rule 425.3 as one of three rules with deficiencies in the 2017 RACT SIP submittal that needed to be corrected in order to demonstrate RACT for non-CTG major sources of NOx. As a result, the District amended Rule 425.3 on March 8, 2018 to correct the RACT deficiencies and fulfill RACT requirements, specifically lowering NOx emission limits.

III. EPA RULE EVALUATION

February 2023, EPA released a Technical Support Document (TSD) evaluation of the 2018, Rule 425.3 amendment. Although the TSD evaluation indicates that the revised NOx emission limit is more stringent and strengthens the SIP, EPA notes Rule 425.3 contains multiple exemptions for periods of startup, shutdown, and breakdown/malfunction (SSM). EPA does not believe the SSM provisions are approvable into the SIP because the rule fails to provide appropriate alternative emission limitations (AELs) that minimize the frequency of SSM events or minimize the impact of emissions during SSM events. Therefore, the EPA recommended a limited approval and limited disapproval of the 2018, Rule 425.3 amendment (CAA §§ 110(k)(3) and 301(a)).

The limited approval would add the 2018 amendment of Rule 425.3 to the SIP, replacing the current SIP-approved version. EPA states this is advisable because several sections of the amendment are SIP-strengthening, (e.g., more stringent NOx emission limits and longer retention times of records).

The limited disapproval is due to the emission limit exemptions for periods of SSM. EPA believes the revised NOx limit established in the rule is not continuous due to the SSM exemptions and inconsistent with FCAA requirements. If finalized as proposed, the limited disapproval would start sanctions and a Federal Implementation Plan (FIP) clock. The FIP clock could be stopped by the submittal of an amended rule revision resolving the SSM deficiencies.

This staff report discusses the amendments to Rule 425.3 needed to address the deficiencies identified by the EPA. Specifically, the removal of the SSM provisions to achieve full EPA approval and stop the FIP clock.

IV. APPLICABILITY

Provisions of amended Rule 425.3 are applicable to all Portland cement manufacturing facilities operating within the Eastern Kern Air Pollution Control District jurisdiction.

V. DEFINITIONS

The definition of *Low NOx Burner* was removed because it is no longer needed. The definitions for *Shutdown* and *Startup* were revised to align with language of 40 CFR 63, LLL § 63.1341 (Cement NESHAP). The definitions are revised as follows:

Shutdown: The cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

Startup: The time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.

VI. EXEMPTIONS

The exemptions section was removed due to EPA applicability issues with SSM provisions.

VII. REQUIREMENTS

The NOx emission limits listed in Section IV, Requirements of Rule 425.3 are revised as follows: The owner or operator of a Portland cement kiln subject to this Rule, shall not exceed the following NOx emission limits:

1. 2.8 lb/ton of clinker produced over a 30 operating-day rolling average, excluding periods of startup and shutdown as defined in this rule: and

2. 21,528 lb/day only during periods of startup or shutdown as defined in this rule.

Historical Continuous Emissions Monitoring (CEMS) data from the cement plants operating within the District was used to determine the 21,528 lb/day startup and shutdown NOx limit.

VIII. ADMINISTRATIVE REQUIREMENTS

Section V, Administrative Requirements contains revised language to aid in clarity. A requirement to maintain records of calculated NOx emission rates from the kiln in lbs/day during periods of startup and shutdown has been added along with the following updated reporting requirement:

At least every six (6) calendar months, the owner or operator shall submit an excess emissions and continuous monitoring system performance report to the APCO according to 40 CFR 60.7(c). The report shall cover each continuous monitoring system required by Section IV. An excess emission occurs for any unit operating period in which the requirements in Section IV.A are not met. This semi-annual monitoring report may be aligned with the due dates of other reporting requirements to avoid duplication (e.g., semiannual compliance reporting required by title V of the federal Clean Air Act).

For each performance test conducted, the owner or operator shall submit a test protocol to the APCO 30 days prior to any testing and submit a performance test report to the APCO withing 60 days of competition of the testing.

IX. ECONOMIC IMPACTS

Pursuant to California Health & Safety Code (CH&SC) §40920.6(a), the District is required to analyze the cost effectiveness of new rules or rule amendments that implement Best Available Retrofit Control Technology (BARCT) or all feasible measures. Amended Rule 425.3 employs federal RACT requirements, not BARCT on all feasible measures, and is therefore not subject to the cost effectiveness analysis mandate.

X. ENVIRONMENTAL IMPACTS

Both the California Environmental Quality Act (CEQA) and CARB policy require an evaluation of the potential adverse environmental impacts of proposed projects. The intent of amended Rule 425.3 is to protect public health by reducing the public's exposure to potentially harmful NOx emissions. An additional consideration is the impact that the proposed rule may have on the environment. District has determined that no significant adverse environmental impacts should occur as a result of adopting amendments to Rule 425.3.

Pursuant to the Section 15061, Subsections (2) & (3) of the CEQA Guidelines, staff prepared and filed a Notice of Exemption for this project upon adoption.

XI. SOCIOECONOMIC IMPACTS

CHSC Section 40728.5 exempts districts with a population of less than 500,000 persons from the requirement to assess the socioeconomic impacts of proposed rules. Eastern Kern County population is below 500,000 persons.

APPENDIX A:

AMENDED RULE 425.3

PORTLAND CEMENT KILNS
(OXIDES OF NITROGEN)

RULE 425.3 Portland Cement Kilns (Oxides of Nitrogen) - Adopted 10/13/94, Amended 3/8/18, 11/13/24

I. Purpose

The purpose of this Rule is to limit nitrogen oxide (NOx) emissions from Portland cement kilns.

II. Applicability

Provisions of this Rule shall apply to all Portland cement manufacturing facilities operating in the Eastern Kern Air Pollution Control District (District).

III. Definitions

A. 30-Operating Day Rolling Average: Total of all hourly emissions data (in pounds) fuel was combusted in a cement kiln, in the preceding 30 operating-days, divided by the total number of tons of clinker produced in that kiln during the same 30-day period.

B. Clinker: The product of feedstock sintered in a kiln which is then ground and mixed with additives to make cement.

C. Continuous Emissions Monitoring System (CEMS): An instrument satisfying the requirements of 40 CFR, Part 60.

D. Kiln: Any device including associated preheater and precalciner devices that produce clinker by heating limestone and other raw materials for subsequent production of Portland cement.

E. Nitrogen Oxide (NOx) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO2) in the flue gas, collectively expressed as nitrogen dioxide.

F. Operating Day: A calendar day during which Portland cement is manufactured by the kiln. An operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating or was in startup or shutdown.

G. 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.

H. Portland Cement Manufacturing Facility: Any facility that produces Portland cement or associated products, as defined in the Standard Industrial Classification Manual as Industry Number 3241, Portland Cement Manufacturing.

I. Shutdown: The cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

J. Startup: The time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.

IV. Requirements

A. Emissions Limits: The owner or operator of a Portland cement kiln subject to this Rule, shall not exceed the following NOx emission limits:

1. 2.8 lb/ton of clinker produced over a 30 operating-day rolling average, excluding periods of startup and shutdown as defined in this rule: and

2. 21,528 lb/day only during periods of startup or shutdown as defined in this rule.

B. Emissions Monitoring: The owner or operator of a Portland cement manufacturing facility shall provide, properly install, maintain, calibrate, and operate a continuous emission monitoring system (CEMS), as defined in Section III.C., for each emission point from the kiln.

C. Production Monitoring: The owner or operator of a Portland cement manufacturing facility shall determine hourly clinker production by one of the following two methods:

1. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy; or

2. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate the hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, the new ratio must be used going forward, but a retroactive change in clinker production rates previously estimated is not required.

V. Administrative Requirements

A. Annual Demonstration of Compliance: The owner or operator of a Portland cement manufacturing facility shall demonstrate compliance with this Rule by conducting annual testing, not more than 13 months after the most recently conducted testing, pursuant to the following test methods:

1. NOx stack testing for purposes of this Rule shall be conducted using EPA Test Method 7E.

2. Stack gas flow rate testing for purposes of this Rule shall be conducted using EPA Test Method 2.

3. Any owner or operator of a kiln subject to this Rule shall convert observed NOx concentrations to a mass emission rate using the following formula (for purposes of this calculation, standard conditions are @ 68° F and 29.92 inches Hg):

   lb/hr = 7.1497 x 10-6 (ppmv)(dscfm)

   Parts Per Million by Volume: (ppmv)

   Dry Standard Cubic Feet per Minute: (dscfm)

4. For the purposes of this Rule, NOx shall be calculated as NO_2 on a dry basis.

B. Recordkeeping: Any owner or operator subject to the requirements of this Rule shall maintain records of the following:

1. Results of any testing conducted to determine compliance with this Rule as specified in Section V.A.

2. Daily clinker production rates and kiln feed rates. During each quarter of operation, you must determine, record, and maintain the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).

3. Calculated NOx emission rates from the kiln in lbs/ton of clinker produced for each day of operation of the kiln.

4. Results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS required by this rule.

5. Date, time, duration, and calculated NOx emission rates from the kiln in lbs/day, for each period of startup or shutdown.

Such records shall be retained for a minimum of 60 months from date of entry and be made available to District staff upon request.

C. Reporting: Any owner or operator subject to this Rule shall meet the following reporting requirements:

1. Report to the APCO: date, time, duration, magnitude, nature and cause (if known), and corrective action taken of any exceedance.

2. At least every six (6) calendar months, the owner or operator shall submit an excess emissions and continuous monitoring system performance report to the APCO according to 40 CFR 60.7(c). The report shall cover each continuous monitoring system required by Section IV. An excess emission occurs for any unit operating period in which the requirements in Section IV.A are not met. This semi-annual monitoring report may be aligned with the due dates of other reporting requirements to avoid duplication (e.g., semiannual compliance reporting required by title V of the federal Clean Air Act).

3. For each performance test conducted, the owner or operator shall submit a test protocol to the APCO 30 days prior to any testing and submit a performance test report to the APCO withing 60 days of competition of the testing.

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APPENDIX B:

AMENDED RULE 425.3

PORTLAND CEMENT KILNS (OXIDES OF NITROGEN)

STRIKEOUT UNDERLINE

RULE 425.3 Portland Cement Kilns (Oxides of Nitrogen) - Adopted 10/13/94, Amended 3/8/18, 11/13/24

I. Purpose

The purpose of this Rule is to limit nitrogen oxide (NOx) emissions from Portland cement kilns.

II. Applicability

Provisions of this Rule shall apply to all Portland cement manufacturing facilities operating in the Eastern Kern Air Pollution Control District (District).

III. Definitions

A. 30-Operating Day Rolling Average: Total of all hourly emissions data (in pounds) fuel was combusted in a cement kiln, in the preceding 30 operating ~~-~~-days, divided by the total number of tons of clinker produced in that kiln during the same 30-day period.

B. Clinker: The product of feedstock sintered in a kiln which is then ground and mixed with additives to make cement.

C. Continuous Emissions Monitoring System (CEMS): An instrument satisfying the requirements of 40 CFR, Part 60.

~~D. Low-NOx Burner: Type of cement kiln burner that results in decreasing NOx emissions and has an indirect-firing system and a series of channels or orifices that:~~

~~1. 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~~

~~2. Impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.~~

~~E~~D. Kiln: Any device including associated preheater and precalciner devices that produce clinker by heating limestone and other raw materials for subsequent production of Portland cement.

~~F~~E. Nitrogen Oxide~~s~~ (NOx) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO2) in the flue gas, collectively expressed as nitrogen dioxide.

~~G~~F. Operating Day: A calendar day during which Portland cement is manufactured by the kiln. An operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating or was in startup or shutdown.

~~H~~G. 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.

~~I~~H. Portland Cement Manufacturing Facility: Any facility that produces Portland cement or associated products, as defined in the Standard Industrial Classification Manual as Industry Number 3241, Portland Cement Manufacturing.

~~J~~I. Shutdown: The cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.~~The period of time between when kiln raw material feed and fuel to the kiln begin to be decreased to reduce the kiln operating temperature until both feed and fuel are no longer fed into the kiln and it has ceased operation. A shutdown period shall not last more than 36 hours.~~

~~K~~J. Startup: The time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.~~Period of time after non-production of clinker during which a cement kiln is heated to operating temperature from a lower temperature and feed rate is increased to normal production levels. A startup period shall not last longer than 48 hours.~~

~~IV. Exemptions~~

~~The requirements of Section V of this Rule shall not apply to:~~

~~A. Startup and shutdown as defined in this rule; and~~

~~B. Breakdown conditions qualifying under District Rule 111.~~

IV. Requirements

A. Emissions Limits: ~~Effective March 8, 2018, No person shall operate a Portland cement manufacturing facility unless 30-operating day rolling average of NOx emissions from the kiln do not exceed:~~ The owner or operator of a Portland cement kiln subject to this Rule, shall not exceed the following NOx emission limits:

1. 2.8 lb/ton of clinker produced over a 30 operating-day rolling average, excluding periods of startup and shutdown as defined in this rule: ~~or~~and

2. 21,528 lb/day only during periods of startup or shutdown as defined in this rule.~~3.4 lb/ton of clinker produced if low-NOx burner or low-NOx precalciner was installed and made operational by January 1, 2007.~~

B. Emissions Monitoring: ~~Any person who operates~~ The owner or operator of a Portland cement manufacturing facility shall provide, properly install, maintain, calibrate, and

operate a continuous emission monitoring system (CEMS), as defined in Section III.C., for each emission point from the kiln.

C. Production Monitoring: ~~Any person who operates~~ The owner or operator of a Portland cement manufacturing facility shall determine hourly clinker production by one of the following two methods:

1. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy; or

2. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate the hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, the new ratio must be used going forward, but a retroactive change in clinker production rates previously estimated is not required.

V~~I~~. Administrative Requirements

A. Annual Demonstration of Compliance: ~~Any person who operates~~ The owner or operator of a Portland cement manufacturing facility shall demonstrate compliance with this Rule by conducting annual testing, not more than 13 months after the most recently conducted testing, pursuant to the following test methods:

1. NOx stack testing for purposes of this Rule shall be conducted using EPA Test Method 7E.

2. Stack gas flow rate testing for purposes of this Rule shall be conducted using EPA Test Method 2.

3. Any owner or operator of a kiln subject to this Rule shall convert observed NOx concentrations to a mass emission rate using the following formula (for purposes of this calculation, standard conditions are @ 68° F and 29.92 inches Hg):

   lb/hr = 7.1497 x 10-6 (ppmv)(dscfm)

   Parts Per Million by Volume: (ppmv)

   Dry Standard Cubic Feet per Minute: (dscfm)

4. For the purposes of this Rule, NOx shall be calculated as NO_2 on a dry basis.

B. Recordkeeping: Any owner or operator ~~person~~ subject to the requirements of this ~~rule~~ Rule shall maintain records of the following:

1. Results of any testing conducted to determine compliance with this Rule as specified in Section VI.A;.

2. Daily clinker production rates and kiln feed rates. During each quarter of operation, you must determine, record, and maintain the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow);.

3. Calculated NOx emission rates from the kiln in lbs/ton of clinker produced for each day of operation of the kiln;.

~~4. Date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emissions control equipment or emission monitoring equipment; and~~

~~5~~4. Results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS required by this rule.

5. Date, time, duration, and calculated NOx emission rates from the kiln in lbs/day, for each period of startup or shutdown.

Such records shall be retained for a minimum of 60 months from date of entry and be made available to District staff upon request.

C. Reporting: Any owner or operator ~~person~~ subject to this Rule shall meet the following reporting requirements:

1. Report to the APCO: date, time, duration, magnitude, nature and cause (if known), and corrective action taken of any exceedance;.

2. At least every six (6) calendar months, the owner or operator shall submit an excess emissions and continuous monitoring system performance report to the APCO according to 40 CFR 60.7(c). The report shall cover each continuous monitoring system required by Section IV. An excess emission occurs for any unit operating period in which the requirements in Section IV.A are not met. This semi-annual monitoring report may be aligned with the due dates of other reporting requirements to avoid duplication (e.g., semiannual compliance reporting required by title V of the federal Clean Air Act).

3. For each performance test conducted, the owner or operator shall submit a test protocol to the APCO 30 days prior to any testing and submit a performance test report to the APCO withing 60 days of competition of the testing.~~Supply APCO copy of all test protocols at least 30 days prior to testing and copy of test results within 60 days following testing.~~

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APPENDIX C

AMENDED RULE 425.3

PORTLAND CEMENT KILNS (OXIDES OF NITROGEN)

RESPONSE TO COMMENTS

On September 18, 2024, the District held a public rule development workshop at the District Board Room in Tehachapi, CA to present proposed amendments to Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen). The District also submitted copies of the proposed revisions to the Air Resources Board (CARB) and the Region IX office of the U.S. Environmental Protection Agency (EPA) for a 30-day review.

Industry representatives present at the 9/18/2024, workshop provided no questions but expressed their appreciation for the effort and willingness of District staff to work with them while drafting amendments to the rule. The District received one written comment from National Cement, however, no written public comments were received by the District following the workshop. CARB did not provide comments on proposed amendments to Rule 425.3. following the workshop.

I. NATIONAL CEMENT COMMENT

I appreciate your continued communication regarding this topic. I do have one concern regarding the definition of 'Shutdown'. I am in agreement with the shutdown beginning when feed is halted, but there are some cases where the kiln will remain rotating through the aid of the donkey motor between shutdown and startup.

For example, if a shutdown is required the kiln will continue to rotate to ensure cooling of the tube occurs uniformly to avoid catastrophic buckling. This is especially important during rain or high winds, which we are no stranger to at this elevation.

DISTRICT
These definitions are from 40 CFR 63, LLL (cement NESHAP) so National Cement is already subject to these requirements. I would like to point out that shutdown does not have a time limit, only a NOx limit of 21,528 lb/day. According to the definition, the facility will remain in a period of shutdown for as long as the kiln is rotating. The main thing is NOx stays below 21,528 lb/day during shutdown. As long as you are below that limit you will be in compliance regardless of actual duration of shutdown.

The transition from shutdown to startup is when the kiln turns on the induced draft fan and begins firing fuel in the main burner. There are additional conditions describing when startup ends. Please see the rule definition of startup for all provisions.

II. EPA COMMENTS

We recommend adding specific recordkeeping requirements for startup/shutdown periods in Section VB. For example: Calculated NOx emission rates from the kiln in lbs/day for each startup and shutdown period.

DISTRICT
Recording keeping language is included in Section V.B.5. of the amended rule.

EPA
Please ensure the Staff Report includes the data used to determine the new startup/shutdown limit.

DISTRICT
This information is included in Section VII of the staff report.

EPA
The existing language in V.C is nearly sufficient on its own – but lacks clarity on when reporting is required and what an exceedance is. You could remove V.D and update V.C as follows:

At least every six (6) calendar months, the owner or operator shall submit an excess emissions and continuous monitoring system performance report to the APCO according to 40 CFR 60.7(c). The report shall cover each continuous monitoring system required by Section IV. An excess emission occurs for any unit operating period in which the requirements in Section IV.A are not met. This semi-annual monitoring report may be aligned with the due dates of other reporting requirements to avoid duplication (e.g., semiannual compliance reporting required by title V of the federal Clean Air Act).

For each performance test conducted, the owner or operator shall submit a test protocol to the APCO 30 days prior to any testing and submit a performance test report to the APCO withing 60 days of competition of the testing.

DISTRICT
The requested language has been included in Section V of the Rule.

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