



# **Eastern Kern APCD**

**Rule Development  
Public Workshop  
September 18, 2024**



# Workshop Agenda

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Rule 425 – Stationary Gas Turbines (NO<sub>x</sub>)

Rule 425.3 – Portland Cement Kilns (NO<sub>x</sub>)



# Background

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NO<sub>x</sub> is a precursor pollutant that photochemically reacts with VOCs, high temperatures, and sunlight to form ground-level ozone.

High levels of ground-level ozone can result in significant negative impacts to human health and the environment.

EPA gives areas within the U.S. attainment designations based on concentrations of regulated air pollutants.

The Clean Air Act (CAA) requires ozone nonattainment areas to implement Reasonably Available Control Technology (RACT).



# 2017 RACT SIP

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In 2017, the District adopted a RACT SIP to demonstrate all major stationary source NO<sub>x</sub> rules achieved RACT pursuant to the 2008, 8-hour ozone NAAQS (75 ppb).

The RACT SIP identified deficiencies in Rules 425, (Stationary Gas Turbines) and 425.3, (Cement Kilns) that needed to be corrected to fulfill RACT.

In 2018, the District amended both rules (425 & 425.3) to address the deficiencies and demonstrate RACT.



# EPA Rule Evaluations

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February 2023, EPA released a Technical Support Document (TSD) evaluation of each 2018 amendment (425 & 425.3).

TSDs indicate strengthening & relaxation provisions of each rule.

EPA believes the relaxations weaken the SIP, and therefore the amendments cannot be fully approved.

EPA proposed a limited approval - disapproval of each rule.

Each limited disapproval started a Federal Implementation Plan (FIP) clock that will begin sanctions if the relaxations are not corrected within 18 months.



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# **Rule 425**

## **Stationary Gas Turbines**



# Rule 425 TSD

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The TSD notes that the 2018 amendment largely fulfills FCAA requirements by tightening NO<sub>x</sub> limits for most units.

However, the revised NO<sub>x</sub> limits for the Westinghouse W251B10 turbine of *25 ppmv for gaseous fuel and 65 ppmv for liquid fuel* is not justified and does not meet current RACT requirements.

EPA states the NO<sub>x</sub> limits in the 1993 SIP approved rule is more stringent, therefore the 2018 amendment allows relaxation.

EPA also recommends revising Monitoring and Recordkeeping provisions during startup and shutdown periods to limit NO<sub>x</sub> emissions.

# Rule 425 Revised NO<sub>x</sub> Limits

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The NO<sub>x</sub> emission limits listed in Section V, Requirements for the owner or operator of a Westinghouse W251B10 with an Authority to Construct issued before January 1, 1983, using dry low-NO<sub>x</sub> combustors is being revised.

**From:**

25 ppmv at 15% O<sub>2</sub> when fired with gaseous fuel or,  
65 ppmv at 15% O<sub>2</sub> when fired with liquid fuel.

**To:**

20 ppmv at 15% O<sub>2</sub> when fired with gaseous fuel.

Liquid fuel will no longer be approved for use with the Westinghouse W251B10.



# Rule 425 Admin Requirements

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The following Federal Reporting requirement is being added:

At least every six (6) calendar months, the owner or operator shall submit all required federal testing and reporting records to the APCO. This semiannual reporting requirement 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).





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# **Rule 425.3**

## **Cement Kilns**



# Rule 425.3 TSD

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The TSD evaluation notes the revised NO<sub>x</sub> emission limit is more stringent and therefore strengthens the SIP.

However, the NO<sub>x</sub> limit is not continuous due to the exemptions during periods startup, shutdown, and malfunction (SSM).

EPA believes a limited approvable is advisable because several sections of the 2018 amendment are SIP-strengthening; and

EPA believes a limited disprovable is warranted because SSM provisions are inconsistent with FCAA requirements.

# Rule 425.3 Revised NO<sub>x</sub> Limits

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## **Existing operating NO<sub>x</sub> limit:**

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.*

## **Added SSM NO<sub>x</sub> limit:**

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

Continuous Emissions Monitoring (CEMS) data from cement plants during SSM was used to determine the 21,528 lb/day startup and shutdown NO<sub>x</sub> limit.

# Rule 425.3 Exemptions

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The exemptions section of 425.3 is being removed due to EPA applicability issues with the SSM provisions.

~~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.~~

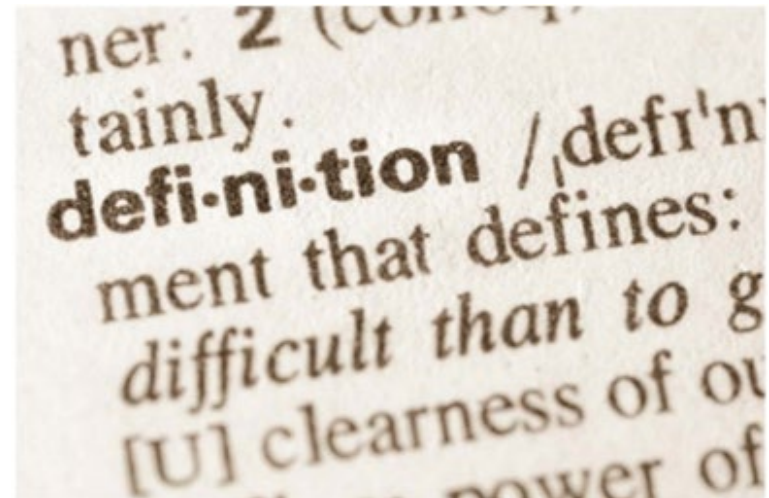


# Rule 425.3 Definitions

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The definition of Low NOx Burner is being removed because it is no longer needed.

The definitions for **Startup** and **Shutdown** are being revised to align with language of 40 CFR 63, LLL § 63.1341 (Cement NESHAP).





# Rule 425.3 Admin Requirements

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A requirement to maintain records of calculated NO<sub>x</sub> emissions from the kiln in lbs/day during periods of startup and shutdown, is being added to the rule.

A Federal Reporting requirement is also being added:

At least every six (6) calendar months, the owner or operator shall submit all required federal testing and reporting records to the APCO. This semiannual reporting requirement 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).



# Rule Approval Process

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The District will be accepting written comments and concerns from persons interested in the proposed amendments to Rules 425 and 425.3 for a period of 30 days following the workshop.

The District anticipates the amended Rules will be considered for adoption by the Board of Directors at the November 7, 2024, Board Meeting.



# Questions Comments

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