

Executive Summary

Proposed Rulemaking – Cement Kilns

The proposed amendments to *25 Pa. Code* Chapter 129 (relating to standards for sources) establish §§ 129.401-129.405 which include revisions to the nitrogen oxides (NO_x) emissions standards for Portland cement kilns during the ozone season for the purpose of reducing NO_x emissions. The proposed amendments would allow compliance to be demonstrated on a kiln-by-kiln basis, a facility-wide averaging basis or a system-wide averaging basis among Portland cement kilns under the common control of the same owner or operator in the Commonwealth. Surrender of Clean Air Interstate Rule (CAIR) NO_x Ozone Season allowances is an additional compliance option provided by the proposed regulation. The proposed amendments also include reporting, recordkeeping and monitoring requirements.

The proposed rulemaking will affect the owners and operators of the nine cement plants with 21 cement kilns in Pennsylvania. These cement kilns are one of the largest industrial NO_x emission source categories, and account for approximately 29% of the more than 45,000 tons per year of NO_x emitted into the air from all nonelectric generating unit sources in the Commonwealth. The owners or operators of the facilities will be required to meet revised NO_x emission limitations and comply with administrative requirements including emissions monitoring and reporting.

The proposed amendments add new definitions and terms to *25 Pa. Code* § 121.1 (relating to definitions) which are used in the substantive provisions under §§ 129.401 – 129.405 (relating to emissions of NO_x from cement manufacturing). The terms include “Calcine,” “Portland cement” and “Preheater cement kiln.” In addition, the proposed amendments revise the following definition and term in § 121.1, “CEMS-Continuous emissions monitoring system.”

Proposed § 129.401 (relating to applicability) provides that beginning May 1, 2009, an owner or operator of a Portland cement kiln shall comply with the requirements in this section and §§ 129.402-129.405.

Proposed § 129.402 (relating to emission requirements) requires that the owner or operator of a Portland cement kiln determine allowable emissions of NO_x by multiplying the tons of clinker produced by the Portland cement kiln for the period from May 1 through September 30, 2009, and for each year thereafter.

Proposed § 129.403 (relating to compliance determination) requires, among other things, that not later than May 1, 2009, the owner or operator of a Portland cement kiln shall install, operate and maintain CEMS for NO_x emissions, and report CEMS emissions data to the Department in accordance with the CEMS requirements of Chapter 139, Subchapter C (relating to requirements for continuous in-stack monitoring for stationary sources).

Proposed § 129.404 (relating to compliance demonstration) provides that by October 31, 2009, and of each year thereafter, the owner or operator of a Portland cement kiln shall report certain information to the Department. The owner or operator of a Portland cement kiln or multiple Portland cement kilns shall demonstrate compliance with the emission requirements specified in § 129.402 on a kiln-by-kiln basis, a facility-wide emissions averaging basis or a system-wide averaging basis.

Proposed § 129.405 (relating to recordkeeping) provides that the owner or operator of a Portland cement kiln shall maintain an operating log for each Portland cement kiln that includes certain monthly information.

The proposed amendments specify in § 145.141 (relating to applicability) that beginning May 1, 2009, an owner or operator of a Portland cement kiln would comply only with §§ 129.401-129.405.

This proposed rulemaking will reduce emissions of NO_x in the Commonwealth. The proposed rulemaking will assure that the Commonwealth will continue to experience improved ozone, fine particulate and visibility benefits. NO_x is a precursor to ozone and fine particulates, which also contribute to regional haze. Adoption of NO_x emission limits for cement kilns is part of the Commonwealth's strategy, in concert with other Ozone Transport Region jurisdictions, to reduce transport of ozone to achieve and maintain the health-based 8-hour ozone national ambient air quality standard (NAAQS). In addition, the strategy will provide emission reductions necessary to reduce fine particulate concentrations and improve visibility in the Northeast. The proposed rulemaking will improve public health and social well being by reducing emissions of NO_x, thereby reducing ozone and fine particulate levels and haze formation.

The Department discussed the proposed rulemaking with the Citizens Advisory Council (CAC) on July 17, 2007. The CAC had no comments. This proposed rulemaking was reviewed by the Air Quality Technical Advisory Committee (AQTAC) on July 26, 2007. The AQTAC concurred with the Department's efforts to control NO_x emissions from cement kilns and the Department's recommendation to present the rulemaking to the Environmental Quality Board for consideration as proposed rulemaking. The AQTAC recommended that the Board solicit comment on allowing owners and operators of a cement kiln to demonstrate compliance on an inter-company emissions averaging basis.

Three public hearings are recommended, with a 60-day public comment period.