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**INDEPENDENT REGULATORY REVIEW COMMISSION**  
333 MARKET STREET, 14TH FLOOR, HARRISBURG, PA 17101

July 23, 2008

Honorable Joseph Powers, Acting Chairperson  
Environmental Quality Board  
Rachel Carson State Office Building  
400 Market Street, 16th Floor  
Harrisburg, PA 17101

Re: Regulation #7-419 (IRRC #2682)  
Environmental Quality Board  
Control of NOx Emissions from Cement Kilns

Dear Acting Chairperson Powers:

Enclosed are the Commission's comments for consideration when you prepare the final version of this regulation. These comments are not a formal approval or disapproval of the regulation. However, they specify the regulatory review criteria that have not been met.

The comments will be available on our website at [www.irrc.state.pa.us](http://www.irrc.state.pa.us). If you would like to discuss them, please contact me.

Sincerely,

Kim Kaufman  
Executive Director

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Enclosure

cc: Honorable Mary Jo White, Chairman, Senate Environmental Resources and Energy  
Committee  
Honorable Raphael J. Musto, Minority Chairman, Senate Environmental Resources and  
Energy Committee  
Honorable Camille George, Majority Chairman, House Environmental Resources and Energy  
Committee  
Honorable Scott E. Hutchinson, Minority Chairman, House Environmental Resources and  
Energy Committee

# Comments of the Independent Regulatory Review Commission



## Environmental Quality Board #7-419 (IRRC #2682)

### Control of NOx Emissions from Cement Kilns

July 23, 2008

We submit for your consideration the following comments on the proposed rulemaking published in the April 19, 2008 *Pennsylvania Bulletin*. Our comments are based on criteria in Section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b). Section 5.1(a) of the Regulatory Review Act (71 P.S. § 745.5a(a)) directs the Environmental Quality Board (Board) to respond to all comments received from us or any other source.

#### **1. 25 Pa. Code Chapters 121, 129 and 145 - Control of NOx Emissions from Cement Kilns. - Statutory authority; Implementation procedures; Clarity.**

On July 11, 2008, the U.S. Court of Appeals for the D.C. Circuit vacated CAIR and its associated federal implementation plan. In ruling that the complete CAIR must fail rather than just merely its more problematic components (such as the regional cap and trade system for power plant emissions), the Court in State of North Carolina v. EPA, et al. ruled that the analysis of the U.S. Environmental Protection Agency (EPA) was “fundamentally flawed” and that the federal agency must start its analysis anew. Consequently, what is the Board’s statutory authority for the use of CAIR NOx allowances and revised NOx emission limits in this proposed regulation?

In their letter dated July 18, 2008, Senators Mary Jo White and Raphael J. Musto, Majority and Minority Chairmen of the Senate Environmental Resources and Energy Committee (Senate Committee Chairmen) jointly expressed similar concerns relating to the impact of the Court decision on this proposed rulemaking. They noted that the Court found the state NOx budgets as determined by the EPA were “arbitrary and capricious,” and the Senate Committee Chairmen questioned the Board’s ability to move forward with the regulation.

We urge the Board to address the concerns of the Senate Committee Chairmen, and if substantial changes to this regulation are necessary due to the Court case, then the Board should consider submitting an Advanced Notice of the

Final Rulemaking or publishing the changes as a new proposed regulation in the *Pennsylvania Bulletin*.

The Preamble refers to the PA Department of Environmental Protection's (Department) "Regional Compliance Assistance Program." Has this program been defined by regulation or statute? If so, then the Board should include a cross-reference to the appropriate citation, or the final-form regulation should include a definition. Additionally, how can operators access this program?

The Preamble also mentions several different types of control technologies to achieve NOx emission reductions of greater than 20% from cement kilns. CEMEX questions whether use of these control types implies that facilities can use any of these technologies to meet their reduction targets, without the need for a permitting process. Is this the Board's intent? If not, has the Board considered streamlining the permitting process for installing the NOx reducing technologies?

## **2. Section 121.1. Definitions. - Clarity.**

*CEMS—Continuous emissions monitoring system*

The original definition stated "[f]or purposes of Chapter 127, Subchapter E...." The proposed regulation removes this language and now refers to "[i]n accordance with the standards set forth by the Department **under Chapter 139, Subchapter C....**" (Emphasis added.) The Board should explain why a different Chapter of the regulation now applies to the proposed definition.

## **3. Section 129.401. Applicability. - Implementation procedures.**

This section requires Portland cement kilns to begin to comply with the proposed emission requirements beginning May 1, 2009. This date is also mentioned in Sections 129.403 and 145.141. Will all the cement kilns in Pennsylvania be able to meet this deadline?

## **4. Section 129.402. Emission requirements. - Reasonableness; Need; Clarity.**

*Emission deadlines*

While other sections mention an exact date for compliance with emission requirements, Sections 129.402 (a) and (b), 129.404 (a)(1), (c)(1), (d) and (g)(1) refer to the period of May 1 through September 30 (2009). The final-form regulation should explain the need for this distinction and how it applies to each of the relevant sections listed above.

### *Determination of allowable emissions*

Section 129.402(b) establishes allowable NOx emission limits for the following types of cement kilns: long wet-process cement kilns; long dry-process cement kilns; preheater and precalciner cement kilns.

Armstrong Cement & Supply Corp. (Armstrong) questions whether the basis for the proposed emission limits is the guidelines adopted by the Ozone Transportation Commission (OTC), of which Pennsylvania is a member. In addition, Armstrong asserts that the emission limit in Section 129.402 (b)(1) for wet kilns (3.88 pounds of NOx per ton of clinker) is not based on supportable data. The Board should provide the basis for the limits and explain the data used to make these determinations. If the emission limits are based upon an OTC resolution, then the Preamble to the final-form regulation should compare Pennsylvania's program with how other OTC states are complying with this resolution.

Furthermore, Armstrong states that the EPA has proposed revisions to the new source performance standards for cement kilns, which includes limits for NOx emissions for cement kilns. *See* 73 Fed. Reg. 34072 (June 16, 2008). Should these standards and limits be approved, how will they impact Pennsylvania's regulations? Will their approval result in additional changes to Pennsylvania's NOx emission limits in the near future?

### **5. Section 129.403. Compliance determination. - Fiscal impact; Implementation procedures; Clarity.**

This section explains cement kilns' compliance requirements for NOx emissions limits. We raise five issues.

First, Subsection (a)(1) requires owners or operators of cement kilns to "install, operate and maintain CEMS for NOx emissions" by May 1, 2009. What will the costs be for owners and operators as a result of requiring kilns to install this device in less than a year? Are there alternative methods for compliance other than the use of the CEMS product? The Board should review the fiscal impact of this regulation and consider whether such expedient compliance methods would place an undue financial burden on the regulated community.

Second, Subsection (b) refers to "data invalidated...", yet this Subsection does not explain how data becomes "invalidated." It should be noted that Subsection (b)(1)(2) also refers to an "invalid data period." The final-form regulation should include a definition for "invalidated data." In addition, the Board also should explain the difference between an "invalid data period" and an "alternative reporting period" as mentioned in Subsection (b)(2)(ii).

Third, Subsection (b)(1) refers to the “potential emission rate” for the cement kiln, but does not explain how this rate is determined. The final-form regulation should define this term.

Fourth, Armstrong argues that the data substitution provisions in Subsection (b) are “punitive and unreasonable.” How did the Board determine that the requirements contained in Subsection (b) are appropriate methods of data substitution?

Finally, Subsection (c) states that Portland cement kiln operators shall submit quarterly reports of CEMS monitoring data in “pounds of NOx emitted per hour.” Why does this data not refer to “pounds of NOx per **ton of clinker**,” as Section 129.402 (b) does? (Emphasis added.) The final-form regulation should clarify this distinction.

## **6. Section 129.404. Compliance demonstration. - Implementation procedures; Reasonableness; Need; Clarity.**

### *Subsection (a)*

Subsection (a) requires cement kiln operators to report various information to the Department “by October 31, 2009.” Certain sections of the regulation require compliance with emission limits by September 30, 2009. Will cement plants be able to collect and deliver all the required reports within a month?

This subsection also requires cement kiln operators to submit a report to the Department “in a format approved, in writing, by the Department.” This phrase is vague, and the final-form regulation should provide more detail on the type of format. How will operators be notified of the acceptable reporting format? Will the report form be accessible on the Department’s website? This information also should be included in the final-form regulation.

### *Subsection (b)*

Subsection (b) provides three different methods to demonstrate compliance with the emission requirements in Section 129.402. CEMEX recommends that the Board include a fourth option which would establish a site specific emission limit in tons of NOx during the ozone season. Has the Board considered including this option? In addition, will the Department provide compliance assistance to cement plants?

The Senate Committee Chairmen also expressed concern with subsection (b)(3). They assert that not only is there no environmental justification for allowing system-wide averaging for NOx emissions for facilities under common ownership, but it also could yield impractical results. For example, two facilities located close to each other would not be able to trade allowances

simply because they are owned by the same corporation. The Board needs to explain why allowance trading should be limited to facilities under common ownership.

*Subsection (c)*

The difference between Subsection (b) and (c) is unclear. Subsection (b) lists compliance options that cement kilns **must** follow, however Subsection (c) includes various requirements kilns **may** fulfill. (Emphasis added.) The final-form regulation should clarify what circumstances would necessitate compliance with Subsection (c).

In addition, Subsection (b) refers to “a Portland cement kiln or multiple Portland cement kilns,” and subsection (c) only references “a Portland cement kiln.” Does this subsection also apply to multiple kilns?

*Subsection (c)(1)*

Subsection (c)(1) refers to “CAIR NO<sub>x</sub> Ozone Season allowance,” as defined in “§ 145.202 (relating to definitions).” However, this section of the Code does not include a definition for this term. The final-form regulation should provide the appropriate cross-reference in this subsection.

*Subsection (d)*

This subsection indicates that cement kilns that commence operation after the final-form regulation has been approved may average only those emissions that are below the permitted NO<sub>x</sub> limit for the kiln or “below the **1.52** pounds of NO<sub>x</sub> per ton of clinker.” (Emphasis added.) However, this pound limit is well below that included in the emission limits provided in Section 129.402(b). The final-form regulation should explain why new cement kilns will be subject to a different emission limit than existing kilns.

*Subsection (e)*

Subsection (e) requires the cement kiln operators to surrender the required CAIR NO<sub>x</sub> ozone allowances by “November 1, 2009, and each year thereafter.” This subsection indicates that such surrender is a requirement, while Subsection (c) includes it as a possible method of compliance. The final-form regulation should explain when each of these subsections would apply.

Furthermore, since Subsection (a) requires cement kilns to report their emission data to the Department by October 31, 2009, is it feasible to require cement kilns to surrender NO<sub>x</sub> ozone season allowances one day later?

*Subsection (g)(1)*

This subsection explains how to determine the number of days of violation if a facility has excess emissions for the period May 1 through September 30. The subsection states that “[e]ach day in that period...constitutes a day in violation **unless the owner or operator of the Portland cement kiln demonstrates that a lesser number of days should be considered.**” (Emphasis added.) The Board should explain what circumstances would warrant such consideration.

**7. Section 129.405. Recordkeeping. - Implementation procedures; Clarity.**

*Subsection (b)(1)*

There should be a period at the end of the sentence in this subsection. The final-form regulation should correct this typographical error.

*Subsection (c)*

Subsection (c) requires cement kiln owners or operators to maintain records for 5 years. How did the Board determine this was an appropriate time frame?

Subsection (c) also requires owners and operators to make their records available to the Department “upon request.” It is unclear whether the Department’s requests will be in writing. The final-form regulation should specify that the Department will make these requests in writing.

This concern also applies to requests for information by the Department that are described in Section 129.405(a). The final-form regulation should specify that the Department also will make these requests in writing.

### Facsimile Cover Sheet

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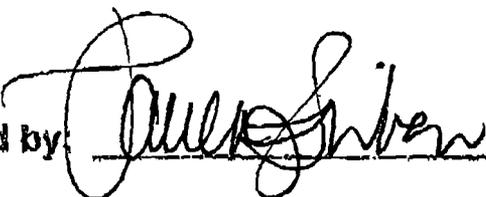


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**To:** Debra L. Failor  
**Agency:** Environmental Quality Board  
**Phone:** 7-2814  
**Fax:** 705-4980  
**Date:** July 23, 2008  
**Pages:** 8

**Comments:** We are submitting the Independent Regulatory Review Commission's comments on the Environmental Quality Board's regulation #7-419 (IRRC #2682). Upon receipt, please sign below and return to me immediately at our fax number 783-2664. We have sent the original through interdepartmental mail. You should expect delivery in a few days. Thank you.

Accepted by:  Date: 7-23-08