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September 30, 2008

U.S. Environmental Protection Agency
EPA Docket Center
1200 Pennsylvania Avenue, NW
Mail Code 6102T
Washington, DC 20460
Re: Docket ID No. EPA-HQ-OAR-2007-0877

To Whom It May Concern:

On behalf of the National Association of Clean Air Agencies (NACAA), thank you for the opportunity to comment on the proposed rule titled, "Standards of Performance (NSPS) for Portland Cement Plants" (*73 Federal Register* 34072). NACAA is the national association of air pollution control agencies in 53 states and territories and over 165 metropolitan areas throughout the United States.

The Clean Air Act requires EPA to revise NSPS for major industrial sectors every eight years. Yet, NSPS for Portland cement plants were last revised in 1988, 20 years ago (*53 Federal Register* 50354). This rule is long overdue, particularly in light of the air pollution emissions, and adverse health impacts, emanating from these operations. Currently, there are 118 cement plants operating in 38 states.¹ These facilities account for significant releases of particulate matter, nitrogen oxides (NO_x), sulfur dioxide (SO₂), volatile organic compounds (VOCs), carbon monoxide (CO), carbon dioxide (CO₂) and toxic air pollutants. EPA's proposal recognizes that this industrial sector can do far more than it has been doing to reduce emissions from new, reconstructed and modified facilities. As discussed below, although we generally support the NSPS proposal, we urge EPA to make several strengthening changes to the rule.

Section 111(b) of the Clean Air Act requires EPA to establish, and, as new technology is developed, revise the NSPS for categories of sources that cause, or contribute significantly to, air pollution that may reasonably be anticipated to

¹ See www.cement.org/basics/cementindustry.asp

endanger public health or welfare. NSPS apply, as in the case of this proposed rule, to new, reconstructed and modified sources. The level of control to be achieved under Clean Air Act §111 is referred to as best demonstrated technology (BDT). EPA states in its proposal that it has based BDT on recently issued state permit data and best available control technology (BACT) determinations developed as part of new source review (NSR). The agency states that the main difference between BACT and BDT determinations for purposes of NSPS is that a BACT determination is made on a site-specific basis. (73 *Federal Register* 34075). The association agrees with this approach.

Output-Based Standards

EPA proposes adopting a new normalizing parameter of pounds per ton (lb/ton) of clinker² that will replace the previous lb-per-ton of dry feed limit (73 *Federal Register* 34076). The agency explains that this will avoid rewarding a source for becoming less efficient (i.e., requiring more feed to produce a unit of product). A regulatory change that discourages facilities from operating less efficient kilns will be beneficial to air quality, and will avoid the situation described by EPA, in which inefficient kilns may require greater amounts of feed and emit more tons per year of pollution but nonetheless remain in compliance with emissions limits that are based on pounds (per pollutant) per ton of dry feed (*Id.*). NACAA strongly supports this change and the reasoning behind it.

Particulate Matter (PM) Limit

EPA has proposed a particulate standard for new cement kilns of 0.086 lb/ton of clinker. The agency states that meeting this standard will entail installation of fabric filters, and, in some cases, membrane bags. NACAA agrees with the BDT analysis and conclusion, and supports the PM NSPS level proposed.

NO_x Limit

EPA points out that the current NSPS do not regulate NO_x emissions for Portland cement facilities, and therefore proposes NO_x limitations for new, modified or reconstructed kilns. The agency notes in the proposal that many states issuing construction and operating permits for new kilns have specified emission limits for NO_x, and that recent state and local agency BACT determinations have based NO_x limits on the use of selective noncatalytic reduction (SNCR) “in combination with well-designed staged combustion in the calciner” (73 *Federal Register* 34078). EPA also discusses the steep reductions in NO_x emissions that have been successfully achieved by European plants through selective catalytic reduction (SCR).

² Portland cement clinker is unfinished raw material that is usually made by heating ground limestone and clay at a temperature of about 1400 C-1500° C. The clinker is then ground up to a fine powder to produce cement.

NACAA applauds EPA's decision to add NO_x to the NSPS for cement kilns. However, we recommend that EPA adopt SCR as Best Demonstrated Technology for NO_x control for this sector. We are confident that this technology will enable facilities to reach and exceed the NO_x emission limit that EPA has proposed. See Attachment. Additionally, NACAA strongly supports the requirements proposed by EPA for continuous emissions monitoring for both SO₂ and NO_x to assure compliance with applicable emissions limits. (73 *Federal Register* 34083). Finally, basing this standard and the SO₂ standard discussed below on a 30-day rolling average appears reasonable to state and local air agencies.

SO₂ Limit

State and local experts, who have had long experience with this industry, believe that the proposed NSPS limit for SO₂ does not reflect what most plants are capable of achieving. EPA has proposed 1.33 lb/ton of clinker, or, alternatively, a 90-percent emissions reduction measured across the control device, such as an alkaline wet scrubber. Even taking into account regional variability in the pyritic sulfur content of the raw materials, NACAA finds that most cement kilns already achieve lower SO₂ emissions than the 1.33 lb/ton of clinker proposed. For example, one local agency commented, "the sulfur emission rates from these plants are generally low, even with high sulfur fuels. [Our] plant emits about 75% of the level proposed without any controls." In addition, data in EPA's Technical Support Document indicate that all of the plants analyzed (except one) had SO₂ permit values of approximately 0.20 lb/ton of clinker—and, in fact, were operating with actual sulfur emissions of less than 10 percent of the permit limits.³ Even allowing for the fact that the kilns analyzed had very low-sulfur feed materials, there is a significant disparity between the proposed level of 1.33 lb/ton of clinker and the level of 0.20 lb/ton of clinker achieved, on average, by the plants analyzed by EPA. NACAA urges EPA to reexamine and substantially tighten this limit as we do not believe that the proposed level represents BDT.

Work Practice Standards Must Address Fugitive Emissions

NACAA strongly recommends that EPA promulgate NSPS for fugitive emissions from clinker storage piles, raw materials handling, and baghouse fall-out from cement plants. These sources of fugitive emissions contain not only fine particulate emissions, which pose substantial harmful effects to public health, but a number of inorganic hazardous air pollutants, such as arsenic, mercury⁴ and hexavalent chromium. A recent California study indicates that high levels

³ Technical Support Document for Portland Cement New Source Performance Standards Review, p. 8 (May 2008)

⁴ Given mercury's toxicity and the significant mercury emissions from Portland cement plants, NACAA urges EPA to expeditiously adopt a Maximum Achievable Control Technology (MACT) floor for new sources that comports with the repeated directives of the D.C. Circuit Court of Appeals in MACT cases. We urge EPA to arrive at an

of hexavalent chromium, in particular, are emanating from Portland cement facilities, resulting in ambient impacts—and increased cancer risks—in communities near the plants.⁵ EPA should promulgate work practice standards to reduce the hexavalent chromium emissions from cement handling and production. Specifically, storage piles of clinker should be either partially or, preferably, fully enclosed; installation of wind screens should be considered; and other corrective work practice measures evaluated and promulgated.

NACAA appreciates the opportunity to provide these comments on EPA’s proposed rulemaking revising the NSPS for Portland cement facilities. If you have any questions about these comments or desire further information, please do not hesitate to contact one of us or Mary Stewart Douglas of NACAA.

Sincerely,



Robert Hodanbosi
Ohio
Co-Chair Permitting Committee



Ursula Kramer
Pima County, Arizona
Co-Chair Permitting Committee

adequately protective mercury MACT emissions limit for new (as well as existing) cement plants in the context of its pending Portland cement reconsideration (71 *Federal Register* 76524). Specifically, EPA should reexamine and reduce the current limit for new plants, which does not reflect the standard of CAA sec. 112(d) (3) and the relevant judicial interpretation of that section.

⁵ See presentation, “Emissions of Criteria and Toxic Pollutants from Portland Cement Manufacturing Plants in South Coast Air Quality Management District,” NACAA Meeting. (August 6, 2008) posted on NACAA web site, Air Pollution Topics, Air Pollutants, Related Links.