Portland Cement Association

**Statement of the Portland Cement Association Regarding the National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry; Proposed Rule**

**June 17, 2009**

**Dallas, Texas**

My name is Andy O'Hare. I am here today representing the Portland Cement Association (PCA), where I am the vice president of regulatory affairs. Founded in 1916, PCA's 45 member companies operate 93 cement plants in 35 states and distributions centers in all 50 states. Portland cement is the essential ingredient in concrete. Concrete, a ubiquitous building material, is the second most consumed material after water globally. Concrete is the foundation of our nation's infrastructure, found in roads, homes, bridges, buildings, dams, levees and in newer applications, such as platforms for wind energy facilities. It is an eco-efficient material. For example, energy savings from concrete buildings more than offset the greenhouse gas emissions associated with cement manufacturing.

Thank you for the opportunity to address this panel of the U.S. Environmental Protection Agency (EPA) on the proposed amendments to the national emission standard for hazardous air pollutants (NESHAP) from the portland cement manufacturing industry. The NESHAP proposal, published on May 6, 2009, unfortunately would undermine the stability of the domestic cement industry, endangering thousands of jobs and the supply of a basic construction material for uncertain environmental benefits. The rule would greatly expand the scope and stringency of the original rulemaking, which was completed in 1999. The very low emission standards for mercury, total hydrocarbons, hydrochloric acid and particulate matter would pose significant challenges for the industry. PCA is troubled that EPA has failed to consider proposed alternative approaches that would address the intent of the Clean Air Act, while ensuring the preservation of the U.S. cement industry and a large number of high paying jobs.

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PCA does not believe the Clean Air Act requires such outcomes, nor do we believe the D.C. Circuit court decisions relied on by EPA require such outcomes. PCA hopes that, through the process of consideration of public comment, EPA will develop a more achievable final rule. PCA stands ready to assist the Agency in identifying and developing the data and methodologies necessary to support more reasonable standards.

The cement industry takes its environmental performance seriously. During the last decade, PCA and its members have addressed rising demand for portland cement while at the same time developing and implementing environmentally and socially responsible business practices. The industry has actively invested in technology to reduce air emissions, minimize waste production, recycle and recover inputs, enhance energy efficiency, and conserve natural resources – all the while producing a reliable and affordable supply of building materials to support our economy.

The proposed rule, however, undermines the balance between environmental protection and economic viability for the cement industry. The rule will shift investment patterns away from U.S. plants, enhancing dependence on foreign sources of supply, constraining infrastructure development, and even increasing global greenhouse gas and mercury emissions. Further, given the central role of cement in the construction and infrastructure sectors, it is unwise to adopt policies that will make the United States dependent on foreign countries for a vital and strategic commodity.

Cement Industry Concerns About the Proposed Rule

Emissions at cement plants are in many ways a reflection of their surrounding geology. The location of any cement plant was in large measure determined by the proximity of the plant to its most substantial raw material – limestone. The limestone quarry is an intrinsic part of the cement plant, without which there would be no plant. In addition, cement manufacturing is a capital intensive industry which calls for long term investment. Normally a cement plant is built where there is at least a 70 year limestone reserve, which means that cement plants become permanent fixtures of the communities in which they are located. For this reason, a cement plant cannot simply relocate to a different source of limestone which has lower concentrations of mercury or

other naturally occurring constituents. The presence of naturally occurring constituents should not disqualify raw materials from their use in cement production.

Far from recognizing the geographical differences and geological influences among cement plants and among cement manufacturing technology with the flexibility inherent in the Clean Air Act, the current proposal sets a standard that a large number of cement plants will simply not be able to achieve, even with state-of-the-art control technology.

By setting a different maximum achievable control technology (MACT) "floor" for each air emission addressed in the proposal in a "stovepipe" fashion, initial studies show that no one cement plant in existence today will be able to meet the proposed standards. This is certainly inconsistent with the Congressional purpose of setting "achievable" standards. On the contrary, MACT standards, as envisioned by Congress, were intended to encourage an industry sector to embrace the emissions levels of the "best performers;" not the levels of a hypothetical plant that does not and cannot exist in practice. EPA must not adopt a pollutant-by-pollutant approach in setting MACT floors. The rule must contain standards the EPA has determined can be achieved by actual facilities, 24 hours a day, 365 days of the year. In setting each pollutant standard or floor for this rule, it seems logical that the facilities with the best operations or technologies would be chosen as the "best performers." However, in the case of mercury, total hydrocarbons and HCl, the "best performers" have the lowest emissions based largely on their source of raw materials, not the technology or operational expertise they employ. This is not a fair advancement of proper operations or pollution control technologies, but rather an endorsement of certain geological characteristics to which not all facilities have access. Importantly, we do not believe it was the intent of Congress to put plants out of business, particularly those that use minerals, such as limestone, as raw materials.

Moreover, given that the composition of limestone and other inputs varies from location to location, the proposal, if adopted, will force cement production out of entire regions of the United States. Control technology performance varies considerably depending on inputs and fuels. The MACT program was not designed by Congress to create "have" and "have-not" states

for industrial capacity. This regional isolation of the cement industry will also place a greater burden on transportation and will increase greenhouse gas emissions.

These and other technical flaws in the proposal can be addressed by giving operators needed flexibility when determining whether to employ technology or other solutions to achieve emissions standards. EPA must take into account chemical variability of the types of inputs used to manufacture cement, and, as suggested in the recent "Brick MACT" court decision, EPA must look to logical breakpoints in creating subcategories of a regulated community in order to ensure that standards are both achievable and reasonable.

Finally, it is worth noting that Congress appears to recognize the need to preserve energy intensive industries like cement manufacturing in the United States. Legislation currently begin developed by the House of Representatives would establish a free emission allowance program for the express purpose of preserving U.S. industry. PCA would be surprised if Congress would endorse an EPA proposal that could obviate the industry preserving program now being developed in climate change legislation.

Inconsistency with the Federal Infrastructure and Stimulus Priorities

As previously noted, it will be cost and technology prohibitive for cement plants to achieve the proposed standards. If plants are forced to close, the result will be an inadequate domestic supply of cement to sustain the projected expansion of infrastructure that will be necessary for the U.S. economy to begin and then continue its road to recovery. The U.S. will need to produce 30 percent more cement by 2020 in order to meet anticipated demand projections.

The current proposal could set standards that make expansion of existing capacity or the building of new capacity exceedingly difficult. In fact, given the international nature of the modern cement industry, it is likely that this rule, and the uncertainty it creates, will re-direct capital from U.S. production to overseas plants that do not face the same inflexibility evident in the rule. Indeed, one of the targeted pollutants is mercury, a global pollutant like a greenhouse gas. Lesser regulated facilities in countries which would be exporters to the U.S. market could create

global increases in mercury pollution. There is more mercury deposited in this country which comes from sources outside our borders than from inside our borders, as evidenced by the elevated levels of mercury found in the Pacific Northwest as a result of mercury releases in China. This clearly could not be what Congress would have intended of the Clean Air Act.

If the proposal actually reduced or eliminated existing cement capacity, the impact on industrial employment and the Texas economy could be substantial. In Texas alone, cement and related construction industries contribute more than 75,000 jobs to the state economy. Nationwide, the economic footprint of the cement industry, combined with construction projects made viable by affordable and reliable cement supplies, accounts for millions of jobs and billions of dollars to the U.S. Gross Domestic Product (GDP).

The American Recovery and Reinvestment Act – the stimulus legislation – set aside some $150 billion for new infrastructure spending. Some members of Congress are already calling for another $500 billion in spending over six years to reauthorize surface transportation laws. In a recent speech, the President referred to this initial salvo as the beginning of "an unrelenting, day-by-day effort to fight for economic recovery on all fronts." Simply put, if the prospect of implementing the rule as proposed directs capital away from cement production in the United States, constrains supply, and will work at cross-purposes to the President's explicit stimulus plan.

Inconsistency with Addressing Climate Change and Other Environmental Priorities

During the last three years, dependence on foreign sources of cement has varied from a high of almost 40 percent to a low in 2008 of about 12 percent. The proposed standards have the potential to create an inadequate domestic supply of one of the fundamental construction components of our growing infrastructure. Economic research data reports that by 2020 the nation will need to produce 30 percent more cement to meet anticipated demand created by economic recovery and population gains. The proposed standards will make it prohibitive for plants to make the modernization investments necessary to meet this demand and lead to forced

closure of domestic plants that will create job losses and hardship in areas throughout the country.

Additionally, the reduction of domestic cement production would cause the nation to become more dependent on cement imports. Based on the proposed standards, to fill the imbalance between expected United States' cement consumption and domestic production, imports could increase to more than 43 percent by 2020. In 2006-2007, there was a lack of cement availability in certain areas of the country as a result of the low inventory in maritime fleet for cement transporting imported product. Such a result is inconsistent with the environmental protection goals that lie at the heart of the Clean Air Act and future climate change legislation.

First, modernizing our existing cement kilns is one of the ways to improve their energy efficiency and their air pollution control. The U.S. industry has been busy doing this for more than a decade, with stellar environmental results. Recent survey data demonstrates that from 1972 to 2006 the cement industry reduced energy consumption by more than 37 percent on a unit basis. This significant achievement was accomplished while U.S. cement production increased by more than 30 million tons annually. The most recent progress involves newly introduced cement guidelines that will allow for greater use of ground limestone as a component in finished cement, which will ultimately reduce $CO_2$ emissions by more than 2.5 million tons annually. Failure to continue this renaissance of the industry's facilities will forsake continued opportunities for reducing air pollution and the carbon footprint of cement production.

Second, reliance on foreign sources of supply actually increases global emissions. Cement imports will be high in volume and especially in weight. Transporting cement to the United States from international markets will require tremendous additional use of fossil fuels, substantially increasing the amount of carbon emissions per unit of cement used in this country.

The rule itself will increase carbon emissions by requiring the use of regenerative thermal oxidizers, or RTOs. Our analysis indicates that some 57 percent of cement capacity will require RTOs at substantial cost to energy efficiency. Employing these devices requires the combustion of natural gas, resulting in significant increases in greenhouse gases. Other environmental

impacts that we believe have been underestimated in this rule are the increased water consumption as a result of the use of scrubbers –especially in the West – and the production of solid waste, such as activated carbon, which can only be disposed of in a landfills. We believe EPA has substantially underestimated the potential for these emissions. PCA believes that it is critical for EPA to avoid unintended environmental consequences associated with certain pollution control approaches.

More directly, many foreign sources of cement are manufactured under conditions that are simply not as environmentally protective as we find in the United States. One of the objectives of the NESHAP is to reduce mercury emissions. However, releases of mercury from less-controlled facilities overseas simply add to the global pool of mercury in the Earth's atmosphere. Thus, increasing mercury emissions overseas under less controlled conditions defeats an important environmental purpose of the proposal.

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In conclusion, we ask EPA to construct a portland cement rule that better reflects the realities on the ground for our industry and that achieves environmental benefits consistent with the Clean Air Act. The air toxics program was never intended to put plants out of business or penalize particular regions of the country based solely on differences in composition of the Earth's crust. The program is supposed to respect variability in inputs and differences in plant design and technology. Failure to remedy the flaws in the proposed rule will do material harm to our industry and its employees, will undermine the economic recovery program carefully articulated by the Obama Administration, and will worsen the world’s most intractable environmental challenges.

Thank you.