PCA

Portland Cement Association

November 30, 2006

Overview of PCA Perspectives on Potential Changes to the Portland Cement NESHAP

(December 2, 2005, 70 Fed. Reg. 72330)

Deadline: 12/8/06

Hydrogen Chloride (HCl)

- An HCl standard for existing or new kilns is not warranted.
- PCA has demonstrated through extensive modeling of virtually all U.S. cement kilns that the risk posed by HCl emissions from these facilities fall well below any threshold of concern for both human and environmental receptors.
- As EPA has acted in other NESHAP rules with similar circumstances concerning HCl (e.g., for the lime industry), the Agency should utilize CAA Section 112(d)(4) as the basis for not setting an HCl standard.

Total Hydrocarbons/Carbon Monoxide (THC/CO)

- THC emissions from cement plants are derived organic compounds contained in the raw materials used to manufacture the product.
- The key determinant associated with the siting of a cement plant is the existence of a large reserve of the necessary raw materials (primarily limestone).
- It is highly impracticable for a plant to use any other source of raw materials, other than that which was the basis for the plant location.
- It would be inappropriate for EPA to designate a regenerative thermal oxidizer (RTO) as a "new source" technology for controlling THC emissions, because the risk is below any threshold of concern and is a waste of a non-renewable resource (natural gas, used to fire the RTO).
- PCA has demonstrated through extensive modeling of virtually all U.S. cement kilns that the risk posed by THC (VOC) emissions from these facilities fall well below any threshold of concern for both human and environmental receptors.
- The existing THC standard for greenfield kilns is sufficiently protective of human health and the environment and should be retained in the final rule.
- If a THC standard is imposed, facilities should be allowed to speciate organic hazardous air pollutants for the purpose of compliance with the standard.

Existing Plants & New @ Existing Plants
Greenfield Plants
THC: 20 ppmv
50 ppmv

Speciate: Ethane/Methane are non-toxic

Mercury

- EPA correctly determined that neither a maximum achievable control technology (MACT) "floor" standard nor a "beyond the floor" standard for mercury is warranted.

- PCA does not support the application of a wet scrubber as a means of controlling cement plant mercury emissions. The technology has not been demonstrated on cement plants for the purposes of controlling mercury emissions.
- This is insufficient data to establish a specific mercury emission limit for new or greenfield cement kilns. Mercury emissions are tied directly to the concentration of the metal in raw materials, for which there is no substitute for existing plants.
- If a standard is recommended for new or greenfield plants, it should be no lower than 120 µg/dscm, for which there is already a cement kiln precedent.
- Companies planning to build new or greenfield facilities in the next two to three years will be in a compliance conundrum.
- PCA supports the following language regarding the use of fly ash as a raw material: "Fly ash from utility boilers that is impacted by the use of activated carbon injection for mercury capture will not be used as an alternative raw material source in the manufacturing of portland cement clinker if it will result in an increase of mercury input to the process, unless the plant desiring to use the fly ash is already subject to a mercury standard (either an emission or input limitation)."

Other Matters

- The alternative approaches suggested for resolving the applicability questions regarding raw material storage facilities are not appropriate.
- Facilities with commingled stack and clinker cooler emissions should be allowed to use proportional contributions to compute a kiln stack opacity limit.
- The proposed one year compliance date for implementing the revised standards is inadequate.