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PCA
Portland Cement Association

PCA Perspectives on Key Commercial and Industrial Solid Waste Incinerator (CISWI) Issues

June 2012

Overview

- Revision of Definition of “Waste Burning Kiln” to Clarify Regulatory Status of the Cement Industry’s Use of Alternative Ingredients (or “Secondary Materials”)
- Clarification of Regulatory Provisions Applicable to Modifications of Existing CISWI Facilities
- Reinstatement of definition of “contained gaseous material”

Cement Industry's Use of Alternative Ingredients

- U.S. cement industry has long history of utilizing alternatives to conventional raw materials
- The industry currently uses more than 10 million tons of alternative ingredients annually
- Some of these ingredients may be solid wastes
- Section 129 of the Clean Air Act provides EPA with authority to regulate only “combustion” of solid waste
- Non-hazardous ingredients used by the industry to make cement are not “combusted.” The practice, is, therefore, not subject to Section 129.

Materials Used by the Cement Industry

Fuels (2 million tons annually)

- Scrap tires
- Plastics
- Municipal refuse
- Coal tar sludge
- Meat and bone meal
- Carbon black residue
- Spent water treatment resins
- Used Oil
- Wood products
- Rice hulls and other biomass

Ingredients (10 million tons Annually)

- Scrap tires (Fe)
- Mill scale (Al, Fe, Si)
- Filter cake (Ca, Si)
- Cracking catalysts (Al, Si)
- Blast furnace slag (Al, Ca, Fe, Si)
- Foundry sand (Si)
- Petroleum contaminated soil (Al, Si)
- Bottom ash (Al, Ca, Fe, Si)
- Water treatment sludge (Al, Ca, Si)
- Fly ash (Al, Fe, Si)
- Refractory brick (Al, Ca, Si)
- Metallurgical slag (Al, Si)

Cement Industry's Use of Alternative Ingredients

- Definition of “waste burning kiln” in CISWI rule should be revised to avoid including industry practice under scope of CISWI rule.
- Definition recommended by PCA and agreed to by EPA:
 - Waste-burning kiln: means a kiln that is heated, in whole or in part, by combusting solid waste (as that term is defined by the Administrator pursuant to Subtitle D of RCRA). Secondary materials used in Portland cement kilns shall not be deemed to be combusted unless they are introduced into the flame zone in the hot end of the kiln or mixed with the precalciner fuel

Modification of Existing CISWI Facilities

- CISWI Standards are found under 40 CFR, Part 60, Subpart CCCC (new) and DDDD (existing)
- “Modification” is broadly defined under the Part 60 general provisions at Section 60.2 and then qualified at Section 60.14
- These provisions apply to virtually all Part 60 standards, but not to the CISWI standards under Subpart CCCC and DDDD, for which there is a specific definition of “modification” without the Section 60.14 qualifications
- Consequently, small hourly increases in emissions for existing CISWI facilities can trip the new source Part CCCC standards, which PCA believes are unachievable

Modification of Existing CISWI Facilities

- The operable definition of “modification” under the general provisions of Part 60 (Section 60.2):

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Modification of Existing CISWI Facilities

- Activities or actions deemed **NOT** to be a modification under Part 60 general provisions (Section 60.14)
 - Routine, maintenance, repair or replacement
 - Production rate increase w/o capital expenditure
 - Increase in facility hours of operation
 - Use of alternative fuel (or raw material) that the facility was already capable of accommodating
 - Installation of a new pollution control device
- These provisions (Sections 60.2 and 60.14), if substituted for those in CCCC and DDDD, would minimize the potential for mis-application of the new source CISWI standards

Contained Gaseous Material

- In 2000 CISWI rule, EPA was clear in making a distinction—for the purpose of clarifying CISWI jurisdiction—that only gases in containers that are subsequently combusted would be subject to the rule
- The revised CISWI rule needs to include a definition of “contained gaseous material” to avoid regulation of non-containerized gases, such as landfill gas
 - “Contained gaseous material” means gases that are in a container, when that container is burned (65 Fed. Reg. 75359, December 1, 2000)

PCA Recommendations

- **Cement industry's use of alternative ingredients (or "secondary materials"):** EPA should adopt the proposed definition of "waste burning kiln"
- **Existing CISWI facility modifications:** The definitions under CCCC and DDDD for "modification" should be removed and reference be made to the definition and associated qualifying criteria under Part 60 general provisions (Sections 60.2 and 60.14, respectively)
- **Contained gaseous material:** Final CISWI rule needs to reinstate 2000 definition of "contained gaseous material"



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Thank You!

