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PCA
Portland Cement Association

Solid Waste Identification and Incinerator Rules: PCA Perspectives

February 4, 2011

Agenda

- PCA Concerns with the Solid Waste Identification Proposal
- PCA Concerns with the Commercial and Industrial Solid Waste Incinerator (CISWI) Proposal
- Economic Impacts
- Key Points from Executive Order 13563 Relevant to these Rules
- PCA Recommendations

Solid Waste Identification Proposal Concerns

- Cement kilns are not boilers or incinerators
  - The industry recycles and reuses the energy and mineral contents of various industrial by-products
- Cement manufacturing process uniquely suited to reusing diverse types of materials
  - Kilns have very high temperatures, long residence times and trace elements are incorporated into cement product
- These recycling and reuse practices should be incentivized
  - Conserves natural resources and minimizes industry's environmental footprint, including a reduction in criteria pollutant emissions
  - Preserves precious landfill space; discourages illegal dumping
  - Has been done for many, many years

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)

Alternative Fuels Utilized

Plant Statistics	2007	2008	2009
Total Reporting Plants	98	97	90
Plants Using Alternative Fuel	64	66	63
Percent	65.3	68	70
Types of Alternative Fuels Used*			
Scrap tires (also an raw material ingredient)	41	43	40
Used Oil	15	18	18
Solvents	10	11	11
Other (plastics, biomass, etc.)	39	42	43

* Number of plants. Plants may use more than one type of alternative fuel (2009 reflects poor economic conditions).

Quantities of Alternative Fuels Utilized in Cement Kilns*

Alternative Fuel	Units	2007	2008	2009
Used Oil	Gallons	22,635,768	10,675,288	7,168,381
Other Alternative Fuel	Tons	645,376	719,478	855,376
Solvents	Tons	691,862	743,888	579,636
Scrap Tires (also a raw material ingredient)	Tons	478,858	475,948	355,918

*Approximately 2 million tons of alternative fuels used by the industry annually.

Solid Waste Identification Proposal Concerns

Ingredients

- Section 129 addresses facilities that "combust" solid waste
- Cement plants do not combust materials used as ingredients
- EPA possesses no authority to regulate ingredients as solid wastes
- The industry utilizes over 10 million tons of alternative materials containing ingredients annually

"Discard"

- Different meaning under RCRA Subtitle D compared to Subtitle C
- Materials not *literally* discarded should not be solid waste
- EPA's proposal contravenes the goals of the Resource Conservation and Recovery Act (RCRA)

Solid Waste Identification Proposal Concerns

Processing

- Previously abandoned materials often useable as is; should not require processing to remove solid waste designation

Legitimacy Criteria

- Proposed demonstrations very cumbersome; not appropriate for routinely managed materials

Petition Process

- Very time consuming; unclear whether it is a one time or routine obligation; presents major reuse barrier

CISWI Proposal Concerns

- Cement kilns are regulated under CAA Sections 111 and 112; should not be regulated under Section 129; kilns are not incinerators (or boilers)
- Standards for new sources unachievable;* triggered by hourly increase in emissions; major disincentive for investment in existing plant upgrades/capacity
- Limitations of emission monitoring technology complicate compliance determinations with these stringent standards

*EPA acknowledged this: "Furthermore, we already estimate no new CISWI sources will be constructed, due to the costs associated with the MACT floor limits in the proposed NSPS." (75 Fed. Reg. 31959)

CISWI Proposal Concerns

- Emissions database flawed
- Statistical approach used to compute standards inaccurate
- Overlap between CISWI and portland cement NESHAP not considered, creating a highly uncertain compliance circumstance
  - Impossible to determine when a source would qualify as an "existing" or "new" CISWI source or as a NESHAP source when not using solid waste
  - The availability of alternative materials may change over time

Overlap Among CISWI and NESHAP Sources

- 50 of the 153 kilns in the universe of cement kilns classified as NESHAP sources are also classified as CISWI sources
- Virtually all NESHAP "floor" sources would qualify as CISWI sources
- Section 129 stipulates that facilities regulated under Section 129 may not also be regulated under Section 112
- The inclusion of the same facilities in both rules invalidates both rulemakings

Potential Economic Impacts of CISWI and NESHAP Rules

- Cement industry revenues in 2010 just over $6.5 billion
- As many as 4000 jobs may be lost jobs by 2015, on top of 4000 lost jobs since 2007
- CISWI and NESHAP rules will impose $5.4 billion in compliance costs by 2015
- NESHAP rule will force the closure of 18 plants nationwide by 2013
- Cement imports will soar by 56% by 2025 due to closures, diminished domestic production and demand increases

Relevant EO 13563 Directives

- Section 1: **General Principles**. "…system must protect public health, welfare, safety and our environment, while promoting economic growth, innovation, competitiveness and job creation."
  - The combination of the CISWI and NESHAP rules diminishes economic growth, innovation, competitiveness and impede job creation/preservation
- Section 3: **Integration and Innovation**. "Some sectors and industries face a significant number of regulatory requirements, some of which are redundant, inconsistent and overlapping. …each agency shall promote [such] coordination, simplification, and harmonization."
  - Coordination of Clean Air Act requirements will avoid the redundancy of the CISWI and NESHAP rules

Recommendations

- EPA should significantly limit the scope of the solid waste definition, excluding those materials beneficially reused in cement kilns (already regulated by Section 112);
- EPA should exclude from the scope of the solid waste definition ingredients used as alternatives to conventional raw materials in cement plants
- EPA should administratively stay the portland cement NESHAP (and extend the rule compliance date accordingly) until the Agency completes reconsideration of the CISWI rule
- When crafting the CISWI rule, only those cement kilns that would qualify as CISWI sources should be considered when setting emission standards

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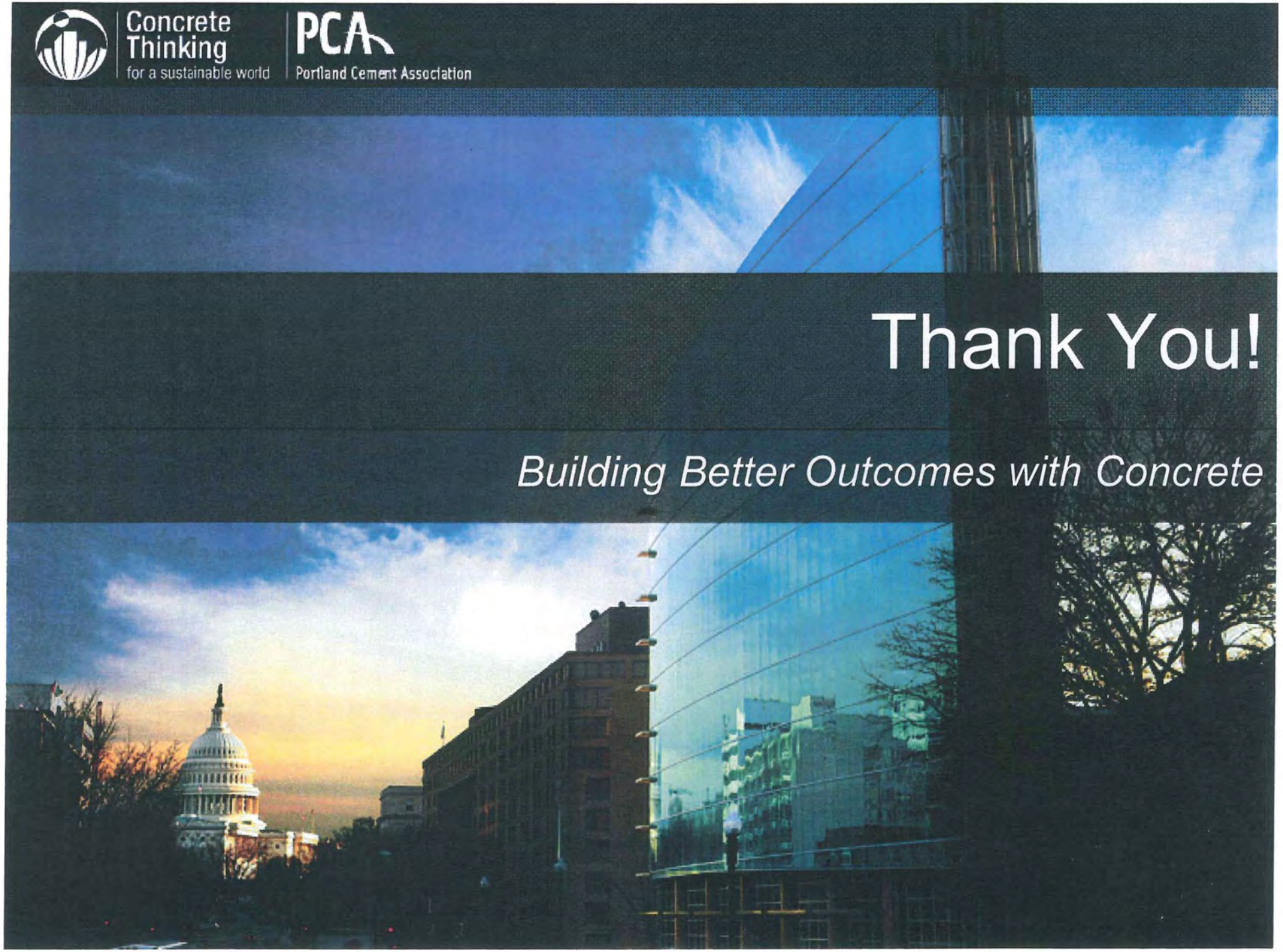

Thank You!

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