

Portland Cement NESHAP and NSPS Reconsideration Final Rule

*Webinar: Summary of 2012 Rules and
Adjustments to Requirements*

February 6, 2013

Overview

- ▶ Background
- ▶ Other related rules
- ▶ Summary of Cement Reconsideration Final Rule
- ▶ Table of expected emissions reductions

Background

- ▶ EPA issued Portland Cement NESHAP and NSPS on September 9, 2010
- ▶ EPA received petitions for reconsideration and granted reconsideration on several issues
- ▶ On December 9, 2011, in *Portland Cement Association (PCA) v. EPA*, court remanded NESHAP back to EPA and stayed the clinker pile standards in NESHAP
 - ▶ Court found EPA failed to reconsider NESHAP to account for those cement kilns now being classified as CISWI units
- ▶ In 2012, EPA entered settlement agreement that requires signature of final rule by December 20, 2012
- ▶ On June 22, 2012, EPA issued Portland cement reconsideration proposal (published July 18, 2012)
- ▶ Agency issued final rule December 20, 2012
- ▶ Expect FR publication later in January 2013

Other Related Rules

- ▶ Non-Hazardous Secondary Materials (NHSM) rule clarifies which secondary materials are, or are not, solid wastes when burned in combustion units
- ▶ Final NHSM rule was part of Boiler/CISWI package
- ▶ Boiler/CISWI package includes requirements for PM monitoring similar to the Cement rule
- ▶ All four rules were signed on December 20, 2012, giving facilities certainty about which rule applies to their kilns

Summary of Cement Reconsideration Final Rules

- ▶ Rules retain emission limits for mercury, acid gases and total hydrocarbons from the 2010 rules
- ▶ EPA revised MACT floors after removing CISWI kilns from database
 - ▶ Mercury (Hg) floor increased slightly (from 55 to 58 lb/MM tons clinker produced)
 - ▶ Hydrogen chloride (HCl) and total hydrocarbon (THC) floors did not change
 - ▶ Particulate matter (PM) floor increased slightly (from 0.04 to 0.05 lb/ton clinker produced)
- ▶ For mercury, set beyond-the-floor Hg limit, which was cost-effective
 - ▶ Lowered limit from 58 lb/MM tons clinker (the revised MACT floor) to 55 lb/MM tons clinker (same as in 2010 final rule)
- ▶ Set revised existing kiln and clinker cooler PM limit of 0.07 lb/ton clinker -- in conjunction with Method 5 stack test with continuous parametric monitoring system (CPMS) to demonstrate compliance
 - ▶ Averaging time changed from long-term (30 day) to short-term (about 3 hours) limit due to issues with PM continuous emission monitoring system (CEMS) at lower concentrations; this raised limit from revised floor of 0.05 to 0.07 lb/ton clinker
 - ▶ This change in averaging time also resulted in changing the PM limit for new sources to 0.02 lb/ton clinker

Summary of Cement Reconsideration Final Rules (cont'd)

- ▶ Set September 2015 existing source compliance date for all standards
- ▶ Set work practice standards for clinker piles in lieu of requiring enclosures and opacity limits
- ▶ Established work practice standards for startup and shutdown
 - ▶ Measurement for these events is not practicable, due to changing variables during kiln startups and shutdowns
- ▶ Emissions from coal mills that use kiln exhaust as part of the cement kiln are now included
 - ▶ Coal mills as integral parts of kiln had not been regulated previously under NESHAP
- ▶ Adjusted NSPS PM standard for modified (new, reconstructed) sources to be consistent with NESHAP PM standard for existing (new) sources
- ▶ The revised rules are expected to yield significant reductions of mercury, acid gases, particulate matter and total hydrocarbons

Table of Expected Emission Reductions

	Mercury (lb/yr)	HCl (tons/yr)	PM (tons/yr)	THC (tons/yr)
Baseline emissions	13,912	3,697	9,267	9,395
Reductions from rule	12,909	3,541	8411	7,731
Percent reductions	93	96	91	82