

PORTLAND CEMENT MANUFACTURING RESIDUAL RISK AND TECHNOLOGY REVIEW

FACT SHEET

ACTION

- On September 1, 2017, the U.S. Environmental Protection Agency (EPA) proposed amendments to the Portland Cement Manufacturing Industry National Emission Standards for Hazardous Air Pollutants.
- Portland cement manufacturing is an energy-intensive process that grinds and heats a mixture of raw materials such as limestone, clay, sand and iron ore in a rotary kiln. That product, called clinker, is cooled, ground and then mixed with a small amount of gypsum to produce cement. The primary use of cement is to produce concrete, formed by mixing cement with gravel, sand, and water.
- A variety of pollutants are emitted from the burning of fuels and heating of raw materials. Emissions also can occur from grinding, cooling and materials-handling steps in the manufacturing process. To control these emissions, the EPA has set maximum achievable technology (MACT) standards, which include emission limits for particulate matter, non-dioxin total hydrocarbons, hydrogen chloride, dioxins/furans and mercury.
- After conducting a risk analysis of facility emissions under the fully implemented MACT standards, the EPA found no appreciable health or ecological risks due to air toxics emissions and, thus, risks are acceptable. Furthermore, the EPA identified no cost-effective controls under the technology review to achieve further emission reductions. The EPA is not proposing any revisions based on the residual risk and technology review.
- This action is proposing amendments to correct and clarify rule requirements and provisions, which would improve monitoring, compliance and implementation of the rule. Some of these amendments include:
 - Clarifying that the 30-operating day rolling average reporting does not apply to the dioxins/furans temperature monitoring system.
 - Revising and adding clarifying text for the particulate matter testing requirement for units with inline raw mills.
 - Adding an appendix to the rule which includes the 1989 Toxic Equivalency Factors for dioxins/furans

BACKGROUND

- The Clean Air Act requires the EPA to regulate toxic air pollutants, also known as air toxics, from large industrial facilities in two phases.
- The first phase is “technology-based,” where the EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or “source category”). These

maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry.

- The second phase is a “risk-based” approach called residual risk. Here, the EPA must determine whether more health-protective standards are necessary. Within 8 years of setting the MACT standards, the Clean Air Act requires the EPA to assess the remaining health risks from each source category to determine whether the MACT standards protect public health with an ample margin of safety, and protect against adverse environmental effects.
- Every 8 years after setting the MACT standards, the Clean Air Act also requires the EPA to review and revise the standards, if necessary, to account for improvements in air pollution controls and/or prevention.

HOW TO COMMENT

- The EPA will accept comments for 30 days after the proposal is published in the *Federal Register*.
- Comments, identified by Docket ID No. EPA-HQ-OAR-2016–0442 may be submitted by one of the following methods:
 - Go to <https://www.regulations.gov/> and follow the on-line instructions for submitting comments.
 - Send comments by email to a-and-r- Docket@epa.gov, Attention Docket ID No. EPA-HQ-OAR-2016-0442.
 - Fax your comments to: 202-566-9744, Attention Docket ID. No. EPA-HQ-OAR-2016-0442.
 - Mail your comments to: EPA Docket Center, Environmental Protection Agency, Mail Code: 28221T, 1200 Pennsylvania Ave., NW, Washington, DC 20460, Attention Docket ID. No. EPA-HQ-OAR-2016-0442.
 - Deliver comments in person to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, DC. Note: In person deliveries (including courier deliveries) are only accepted during the Docket’s normal hours of operation. Special arrangements should be made for deliveries of boxed information.