NESHAP/Clean Air Act: U.S. Environmental Protection Agency Proposes Hazardous Waste Combustor Residual Risk/Technology Review



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

11/11/2025

The United States Environmental Protection Agency ("EPA") published a November 10th Federal Register notice promulgating a proposed rule addressing Clean Air Act National Emission Standards for Hazardous Air Pollutants ("NESHAP") for Hazardous Waste Combustors ("HWC"). See 90 Fed. Reg. 50814.

The proposed rule provides residual risk and technology review ("RTR") for the HWC source category.

This source category includes:

- Petroleum and coal products manufacturing.
- Chemical manufacturing.
- Cement and concrete product manufacturing.
- Other nonmetallic mineral product manufacturing.
- Hazardous waste treatment and disposal.
- Remediation and other waste management services.

See 40 CFR Part 63, subpart EEE.

Section 112 of the Clean Air Act establishes a two-stage regulatory process to address emissions of Hazardous Air Pollutants ("HAPs") from stationary sources.

The first stage is required to identify categories of sources emitting one or more of the HAPs listed in Section 112(b) of the Clean Air Act. A technology-based NESHAP (i.e., a "MACT" standard) is then issued for those sources.

Within eight years of setting the MACT standard, the second stage is supposed to be undertaken. It requires EPA to undertake two different analyses. They include:

1. Technology review.
2. Residual risk review.

The technology review requires that EPA review the technology-based MACT standards and revise them:

…as necessary (taking into account developments and practices, processes, and control technologies) but no less frequently than every eight years, pursuant to Section 112(d)(6) of the Clean Air Act.

As to the residual risk review, EPA is required to evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, and adverse environmental effect.

HWCs are incinerators, cement kilns, lightweight aggregate kilns, boilers, or HCl production furnaces that combust hazardous waste for waste reduction, thermal energy recovery, and/or production of a product. They act as a disposal method for hazardous waste but can also provide other benefits to their owners and operators. For example, the primary purpose of HWC cement kilns is the production of cement using hazardous waste as a fuel to reduce the need for non-waste energy inputs.

EPA in July 2024, issued a notice of proposed rulemaking for the HWC NESHAP regarding emission standards during periods of malfunctions, electronic reporting provisions, emergency safety vent provisions, and other minor technical corrections. EPA states in the November 10th Federal Register notice that it is withdrawing certain aspects of that proposal. It is instead proposing different requirements and soliciting comments on certain topics from the 2024 proposal that include emission standards during periods of malfunction and electronic reporting provisions in this notice of proposed rulemaking.

The term “malfunction” is typically defined as:

… sudden, infrequent, and not reasonably preventable failure of an air pollution control and monitoring requirement, process equipment, or process to operate in a normal and unusual manner which causes, or has the potential to cause, the emission limitations in the applicable standard to be exceeded (i.e., it does not constitute scheduled maintenance).

EPA states that it is proposing revisions to the startup, shutdown, and malfunction provisions of the MACT rule in order to ensure that those provisions are consistent with Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008). The court in that decision vacated two provisions that the court interpreted as exempting sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of startup shutdown or malfunction.

Additional changes to the HWC NESHAP include:

- Requiring electronic reporting of performance test results, notification of compliance reports, and certain other submissions;
- Allowing states to choose to exempt area sources from the requirement to obtain a title V permit;
- Removing the requirement that CO is kept between the average and maximum reported values during the CfPT;
- Explicitly allowing incorporation by reference of operating parameter limits determined during the CPT into title V permits;
- Clarifying that a relative accuracy test audit (RATA) must be performed within 60 days of every CPT;
- Removing the never-implemented requirement that sources install and operate PM CEMS;
- Removing references that were incorrectly incorporated by reference and have since expired;
- Clarifying the demonstration of compliance timeframe for new standards and removing an outdated demonstration of compliance timeline for the 2005 HWC NESHAP; and,
- Other minor editorial corrections.

The proposed rule also stablishes emission limits and work practice standards for:

- Hydrogen fluoride emissions.
- Hydrogen cyanide emissions.

A copy of the Federal Register notice can be downloaded here.