FACT SHEET

Final Amendments to Air Toxics Standards for Municipal Solid Waste Landfills

ACTION

- On February 25, 2020, the U.S. Environmental Protection Agency (EPA) finalized amendments to the 2003 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste (MSW) Landfills.
- EPA issued air toxics standards for the MSW Landfills source category in 2003 that established emission limitations based on maximum achievable control technology (MACT) standards for hazardous air pollutants (HAP) from major and area sources.
- The rule required MSW landfills greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters with uncontrolled emissions greater than 50 Mg/year of non-methane organic compounds (NMOC) to install and operate a gas collection and control system (GCCS).
- Most emissions from MSW landfills come from the continuous biodegredation of the MSW. Landfill gas contains methane, carbon dioxide and more than 100 different NMOC, including, but not limited to, vinyl chloride, ethyl benzene, benzene and toluene.
- Based on the residual risk and technology review, EPA is finalizing no changes to the existing standards because the agency determined the risks to be acceptable with an ample margin of safety to protect public health and the environment. In addition, EPA did not identify any new cost-effective emission controls for MSW landfills.
- EPA is, however, finalizing several minor amendments to reorganize and streamline requirements for MSW landfills that will improve the clarity, compliance and implementation of the rule. These include:
    - overall NESHAP reorganization to reduce overlapping applicability and to promote consistency with the 1996 and 2016 New Source Performance Standards (NSPS) and Emission Guidelines (EG);
    - regulatory text for the 2016 NSPS/EG that allows affected sources to demonstrate compliance with the applicable sections of the rules by “opting in” to the operating, compliance and monitoring provisions of the NESHAP;
    - revisions to the GCCS wellhead temperature operating standard and the associated procedures for enhanced monitoring;
    - requirements for submitting electronic copies of compliance reports, including performance test results; and
    - updated regulatory language for periods of startup, shutdown and malfunction to be consistent with recent court decisions and a work practice standard for time periods when the GCCS is not operating.
- Approximately 738 MSW landfills are subject to the NESHAP.

RESIDUAL RISK ASSESSMENT

- The Clean Air Act (CAA) requires EPA to assess the risk remaining after application of the final air toxics emission standards. This is known as a residual risk assessment.
- Based on the completed risk assessment, available health information and associated uncertainties, EPA determined risks from the MSW Landfills source category are acceptable and provide an ample margin of safety to protect public health.
- The maximum individual lifetime cancer risk for inhalation for the source category is estimated to be less than 10-in-1 million.

TECHNOLOGY REVIEW

- The CAA requires EPA to assess, review and revise air toxics standards, as necessary, taking into account developments in practices, processes and control technologies. The technology review of the standards for MSW Landfills did not identify any developments that would further reduce HAP emissions beyond the original NESHAP.

BACKGROUND

- The CAA requires EPA to regulate toxic air pollutants, also known as air toxics, from categories of industrial facilities in two phases.
- The first phase is "technology-based," where EPA develops standards for controlling the emissions of air toxics from sources in an industry group or "source category." These MACT standards are based on emission levels that are already being achieved by the best-controlled and lower-emitting sources in an industry.
- Within 8 years of setting the MACT standards, the CAA directs 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. This second phase is a "risk-based" approach called residual risk. Here, EPA must determine whether more health-protective standards are necessary.
- Also, every 8 years after setting MACT standards, the CAA requires EPA to review and revise the standards, if necessary, to account for improvements in air pollution controls and/or prevention.

FOR MORE INFORMATION

- Interested parties can download a copy of the final rule notice from EPA's website at the following address: https://www.epa.gov/stationary-sources-air-pollution/municipal-solid-waste-landfills-national-emission-standards.
- Today's action and other background information are also available either electronically at https://www.regulations.gov/, EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center's Public Reading Room.

- The Public Reading Room is located at the EPA Headquarters Library, room number 3334 in the WJC West Building, 1301 Constitution Ave., NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time, Monday through Friday, excluding federal holidays.
- Visitors are required to show photographic identification, pass through a metal detector and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.
- Materials for this final action can be accessed using Docket ID No. EPA-HQ-OAR-2002-0047.

- For additional technical information about the rule, contact Andrew Sheppard at the EPA's Office of Air Quality Planning and Standards, at (919) 541-4161 or sheppard.andrew@epa.gov.