

SCS TECHNICAL BULLETIN

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: SOLID WASTE LANDFILLS

April 13, 2020

Background

On March 26, 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 under 40 Code of Federal Regulations (CFR) Part 63, Subpart AAAAA. In 2003, EPA issued air toxics standards for the MSW Landfills source category, which established emission limitations based on maximum achievable control technology (MACT) standards for hazardous air pollutants (HAP) from major and area source landfills. EPA reviewed these earlier standards over the last several years, and in 2019, published a draft rule to amend the landfill NESHAP rule. With this action, EPA is promulgating the final amended NESHAP for MSW landfills.

This action also finalizes the residual risk and technology review (RTR) conducted for the MSW Landfills source category. Based on the RTR, EPA is finalizing the rule with no changes to the existing standards relative to risk reduction 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 for risk reduction.

History

The NESHAP rule requires 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) in accordance with the applicable landfill New Source Performance Standards (NSPS) and Emission Guidelines (E.G.) as well as comply with additional requirements contained within the NESHAP rule.

The 2003 NESHAP rule required that NSPS/EG landfills develop and implement startup, shutdown, and malfunction (SSM) plans, prepare/submit semi-annual SSM reports, prepare/submit semi-annual NSPS reports (these were required annually in the NSPS rule), and clarified what constituted a deviation under certain NSPS provisions. The rule also accelerated the requirement to install a GCCS for bioreactor landfills. NSPS/EG landfills have been complying with the 2003 NESHAP rule since 2004.

General

The final 2020 NESHAP rule includes the following primary elements:

Technical Bulletin – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: SOLID WASTE LANDFILLS

- Correction and clarification of regulatory provisions related to emissions during periods of startup, shutdown, and malfunction (SSM). NSPS/EG requirements apply at all times To comply with court decisions, including periods of SSM. Originally, periods of SSM were exempt from compliance obligations, and the SSM requirements in the NESHAP rule were used to define these periods. Under the new NESHAP rule, the requirements for SSM plans and reports have been removed, and the applicability of the rules during periods of SSM has been clarified. The new NSPS/EG work practice standard has also been incorporated into the NESHAPs rule.
- Revised wellhead operational standards and corrective action to improve effectiveness and provide compliance flexibility. The new NESHAP rule includes the same provisions contained within the new NSPS/EG rules under 40 CFR Part 60, Subparts XXX, and Cf. However, in addition, the rule modifies the wellhead temperature requirements to allow temperatures up to 145 F instead of 131 F, but also imposes monitoring requirements over 145 F and additional measures for wells that exceed 170 F.
- Reorganization of rule text to incorporate provisions from the new NSPS/EG as well as revisions to those NSPS/EG rules to accommodate the new NESHAP rule (see below); and
- Addition of requirements for electronic reporting of performance test results.

NESHAP Interaction with NSPS/EG

The EPA is also finalizing minor changes to the NSPS/EG for MSW Landfills contained within 40 CFR Part 60, Subparts XXX, and Cf. Specifically, EPA is finalizing provisions to the most recent NSPS and, E.G., that would allow

affected sources to demonstrate compliance with landfill gas control, operating, monitoring, recordkeeping, and reporting requirements by following the corresponding requirements in the NESHAP in lieu of Subparts XXX and Cf. These revisions also prevent landfills subject to Subparts XXX or Cf from being simultaneously subject to both the old NSPS/EG rules.

This would allow landfills to "opt-in" to the NESHAP rule, which also includes all of the same criteria as the NSPS/EG rules, to avoid any confusion regarding which rules to follow. According to EPA, these final amendments will result in improved compliance and implementation of the rule and eliminate some of the confusion created by the previous version of the NESHAP rule, which caused some sites to be simultaneously subject to overlapping requirements of the old and new NSPS/EG rules. However, the exact procedure for opting is not clear and may also require modifications to Title V permits.

For landfills subject to the older versions of the NSPS/EG (Subparts WWW and Cc), these sites can also opt-in to the NESHAPs rule or continue to comply with the existing NSPS or, E.G., requirements. If they are over 50 Mg/year of NMOCs, then they would become subject to the new NESHAPs at the end of the 18-month phase-in period.

Applicability

The NESHAP rule applies to landfills that are major HAP sources, co-located with HAP sources, or those subject to the GCCS requirements of an NSPS or, E.G., rule with emissions greater than 50 Mg/year of NMOCs. If a landfill has NMOC emissions of 34 Mg/year or greater but less than 50 Mg/year, the NESHAPs rule would not apply; however, the site would still have to comply with Subpart XXX and Cf, as applicable. The rule has an 18-month phase-in period before which applicable landfills have to comply with specific requirements in the rule. During that

Technical Bulletin – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: SOLID WASTE LANDFILLS

time, if a landfill does not opt-in early into NESHAPs, landfills should comply with the relevant NSPS or, E.G. rule as well as follow the existing SSM requirements of the old NESHAP rule. After September 27, 2021, all of the requirements of the NESHAP rule must be met. However, during the 18-month window, landfills are given the option of opting into the new NESHAP rule prior to September 27, 2021.

For Additional Information

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>.

SCS's [Clean Air Act Services](#)

Customer Support

Email: service@scsengineers.com

800-767-4727

[Local Offices](#) or [Find a Specialist](#)

For more information, contact:

[Bob Gardner](#), PE, BCEE, Senior Vice President
[Pat Sullivan](#), REA, CPP, Senior Vice President