SCS ENGINEERS

SCS TECHNICAL BULLETIN

EPA UPDATES TO NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

40 CFR 63 SUBPARTS IIII, MMMM, PPPP, WWWW

June 1, 2021

The Clean Air Act Amendments of 1990 (the "Act") requires the United States Environmental Protection Agency (EPA) to regulate hazardous air pollutants (HAPs), also known as air toxics, from industrial categories in two phases.

- In the first "technology-based" phase, EPA develops standards for controlling air toxic emissions from sources in manufacturing. Basing emissions levels already achieved by the best-controlled and lowest-emitting sources in an industry is how Maximum Achievable Control Technology (MACT) standards are determined.
- Within eight years of setting the MACT standards, the Clean Air Act 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, the EPA must determine whether more health-protective standards are necessary.

Every eight years after setting the MACT standards, the Clean Air Act requires that EPA review and revise the standards, if necessary,

to account for improvements in air pollution controls and prevention.

Since the beginning of 2020, EPA has taken final action on the residual risk and technology reviews for 22 HAP emission standards and plans to review and take action on six more in late 2021. Four of the standards already addressed include:

- 1. Surface Coating of Automobiles and Light-Duty Trucks (40 CFR 63 subpart IIII)
- Surface Coating of Miscellaneous Metal Parts and Products (40 CFR 63 subpart MMMM)
- 3. Surface Coating of Plastic Parts and Products NESHAP (40 CFR 63 subpart PPPP)
- Reinforced Plastics Composite Manufacturing NESHAP (40 CFR 63 subpart WWWW)

These standards apply to major sources of HAP in multiple industries.

Subparts IIII, MMMM, and PPPP

EPA concluded that compliance with the current standards by affected industry groups subject to subparts IIII, MMMM and PPPP results in acceptable public health safety; and without the need for additional emission controls in each source category. The

technology review did not identify any costeffective development in practices, processes, or control technologies. Accordingly, EPA did not propose any changes to the existing emission control requirements in subparts IIII, MMMM, and PPPP.

The following key amendments to the three subparts allow improvements to rule effectiveness and regulatory flexibility. EPA also responded to a legal ruling arising from a Court decision in Sierra Club v. EPA, 551.F. 3d 1019 (D.C. Cir. 2008), and revised the Startup, Shutdown, and Malfunction (SSM) provisions of each NESHAP.

- Each source using add-on controls must conduct performance testing and reestablish operating limits no less frequently than every five years to demonstrate compliance.
- Affected sources must now electronically submit notifications, semi-annual reports, and compliance reports (including performance test reports) through EPA's Compliance and Emissions Data Reporting Interface (CEDRI).
 - Located on EPA's Central Data Exchange (CDX), EPA will provide a template for semi-annual reporting.
 - Submit the first semi-annual report through CEDRI on or after the compliance date or once the reporting template is available on the CEDRI website for one year.
- For each source category, EPA revised the SSM provisions of each NESHAP to ensure that they are consistent with the Court decision in Sierra Club v. EPA, 551 F. 3d 1019 (D.C. Cir. 2008).
 - The Court vacated two provisions that exempted source owners and operators from complying with otherwise applicable CAA section 112(d) emission standards during periods of SSM.
- EPA added the option of conducting EPA Method 18 of appendix A to 40 CFR 60 "Measurement of Gaseous Organic Compound Emissions by Gas Chromatography," to measure and then to

- subtract methane emissions from total gaseous organic mass emissions as carbon.
- Removed are references to paragraph
 (d)(4) of the Occupational Safety and
 Health Administration (OSHA) Hazard
 Communication standard (29 CFR
 1910.1200). These references dealt with
 OSHA-defined carcinogens. Replacing
 them are references to a list of HAPs
 regarded as potentially carcinogenic
 based on EPA guidelines.
- Each NESHAP now incorporates by reference (IBR) alternative test methods and references to updated alternative test methods.
- Affected facilities must comply with the new provisions by January 5, 2021.

Subpart WWWW

EPA completed the residual risk and technology review of the original rule and determined that the risks for cancer and non-cancer health effects are low. Therefore, the current standards are acceptable and provide an ample margin of safety to protect public health. EPA proposed no revisions to emissions standards.

Language related to startup, shutdown, and malfunction (SSM) exemptions, development of an SSM plan, and recordkeeping and reporting requirements related to the SSM plan is eliminated from the rule to be consistent with court decisions (Sierra Club v. EPA, 551 F. 3d 1019). In other words, EPA is eliminating the SSM plan and reporting requirements, including reporting requirements for deviations in the semiannual report. This change also removes language that specifically precluded startup and shutdown periods from performance testing as not representative of normal operating conditions. The amended rule requires sources to record process operating data to document what is considered normal operating conditions during the performance test to address the gap.

The EPA also requires notifications, performance test results, and semi-annual compliance reports submitted through the EPA's CEDRI.

For existing sources (sources that began construction on or before May 17, 2019), the effective date for the rule amendments is September 16, 2020. New sources are subject to the rule's compliance date of September 16, 2020, or upon startup, whichever is later.

Semi-annual Compliance Reporting

File semi-annual reports in CEDRI one year after the EPA creates the reporting template. Your certifying official will be required to access CEDRI to submit the reports.

NESHAP	Initial Report Availability	CEDRI Reporting Required
IIII: Surface Coating Auto and Light Duty Trucks	2/3/21	2/3/22
MMMM: Surface Coating Miscellaneous Metal Parts	Future	
PPPP: Surface Coating Plastic Parts	Future	
WWWW: Reinforced Plastics Manufacturing	5/18/20	5/18/21

Do You Need to Update Your SSM Plan?

The SSM provisions in the NESHAP rules date back to 1994. The general provisions of 40 CFR Part 63 subpart A specify a "general duty to minimize emissions during startup, shutdown and malfunction events." This provision provided affected sources with a conditional exemption from continuous compliance with the applicable emission standard(s) during SSM events.

The general provisions of the NESHAP rules are in 40 CFR 63 subpart A and SSM requirements in §63.6. Before January 5, 2021, affected sources that use emission

capture systems and add-on control devices must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3).

The SSMP will address startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control devices. The SSMP is not required on and after January 5, 2021, but affected sources must comply with the emission standards or the work practice standards imposed by each respective rule during the period of SSM.

SCS recommends that sources prepare and implement recordkeeping methods that will document compliance with the emission and work practice standards during periods of SSM.

Do You Need to Revise Your Title V Operating Permit?

Given the complicated nature of the SSM requirements, it may be advisable but not necessarily required to submit a permit revision application for your Title V operating permit. The revision can specifically address the provisions that apply and those that do not apply after the effective dates of September 16, 2020, for Subpart WWWW or January 5, 2021, for Subparts IIII, MMMM, and PPPP.

SCS recommends considering this action to remove certain language from a state-issued air permit, such as SSM requirements, to clarify a facility's compliance position. It may still need to comply with SSM provisions, including an SSMP, but only as a statemandated requirement and not at the federal level.

For more information contact:

Mike McLaughlin, PE, Senior Vice President Pat Sullivan, REA, CPP, Senior Vice President

http://www.scsengineers.com