

FACT SHEET

Final Amendments to Air Toxics Standards and New Source Performance Standards for Lead Acid Battery Manufacturing Plants

ACTION

- On February 7, 2023, the U.S. Environmental Protection Agency (EPA) finalized amendments to the 2007 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lead Acid Battery (LAB) Manufacturing Area Sources. In addition, the action finalizes a new subpart (subpart KKa) under New Source Performance Standards (NSPS), which updates the 1982 Standards of Performance for Lead Acid Battery Manufacturing Plants (subpart KK).
- The LAB manufacturing source category includes any plant that produces lead acid batteries and their processes, including grid casting, paste mixing, lead oxide manufacturing, three-process operations (battery assembly) and lead reclamation.
- The LAB manufacturing source category includes 40 facilities and 39 of these plants are area sources; 39 area sources are subject to both the NESHAP and NSPS.
 - One major source was identified due to potential to emit (PTE) only; permit emission limits are equal to, or lower than, the limits in the NESHAP.
 - The facility is covered by the NSPS.
- Following the technology review for the NESHAP and the NSPS review conducted under the Clean Air Act (CAA), EPA is finalizing rule amendments to:
 - Revise lead emission limits for grid casting and lead reclamation operations for both the area source NESHAP (that applies to all new and existing area source facilities) and in the new NSPS update (subpart KKa) that applies to new, reconstructed, or modified sources;
 - Revise lead emission limits for paste mixing at all facilities for both the NESHAP (that applies to new and existing large facilities) and for the new NSPS subpart that applies to new, reconstructed, or modified sources;
 - Require performance testing once every five years;
 - Establish work practices to minimize fugitive lead dust emissions for the lead oxide loading and unloading areas (including lead oxide storage operations);
 - Require bag leak detection systems for new sources under the NSPS subpart KKa that commence construction after February 23, 2022 and use fabric filter systems with no secondary filter along with operating limits and monitoring parameters;
 - Add bag leak detection operating limits and monitoring parameters for existing sources under the NESHAP and for modified and reconstructed sources under NSPS subpart KKa) that choose to use bag leak detection systems;
 - Increase pressure drop or visible emission observation recordings for fabric filter systems with no secondary filter or bag leak detection systems;
 - Increase inspection frequency of fabric filters that do not have secondary filters or bag leak detection systems;

- Electronic reporting of performance test results, consistent with requirements of other similar NESHAP and NSPS; and
- Removal of exemptions for periods of startup, shut down, and malfunctions.
- EPA is also finalizing a revision to the applicability provisions in the area source NESHAP for battery component facilities that are involved in the primary processes (i.e., grid casting, paste mixing, lead oxide manufacturing and three-process operations) and manufacturing battery parts or input material (i.e., grids and lead oxide) used in the manufacturing of lead acid batteries. These battery component facilities will be subject to the lead acid battery area source NESHAP if the facility is not subject to another NESHAP that controls the relevant lead emissions.

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 lead acid battery manufacturing facilities identified several developments, as described above, that would further reduce lead 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.” For major sources, EPA must establish maximum achievable control technology (MACT) standards. These MACT standards are based on emission levels that are already being achieved by the best-controlled and lower-emitting sources in an industry.
- For area sources, the CAA provides that, in lieu of setting MACT standards, the EPA may promulgate standards for area sources, “which provide for the use of generally available control technology (GACT) or management practices by such sources to reduce emissions of hazardous air pollutants.” In developing such standards, the EPA evaluates the control technologies and management practices that reduce HAP emissions that are generally available. The 2007 NESHAP for LAB manufacturing area sources were established as GACT standards.
- Also, every eight years after setting MACT or GACT standards, the CAA section 112 requires EPA to review and revise the standards (the second phase), if necessary, to account for improvements in air pollution controls, practices, or processes.
- Regarding the NSPS, CAA section 111 requires EPA to determine the best system of emission reduction (BSER) for the source category and the degree of emission limitation

achievable through application of the BSER (considering the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements). EPA must then promulgate standards of performance for new sources that reflect that level of stringency. The 1982 NSPS were established based on BSER available at that time.

- The CAA section 111 requires EPA to, “at least every eight years review and, if appropriate, revise,” the NSPS. The EPA reviews available data and information to determine if BSER has changed and, if so, revises standards to reflect such changes.

FOR MORE INFORMATION

- Interested parties can download a copy of the final rule from EPA's website at the following addresses: <https://www.epa.gov/stationary-sources-air-pollution/lead-acid-battery-manufacturing-area-sources-national-emission> and <https://www.epa.gov/stationary-sources-air-pollution/lead-acid-battery-manufacturing-new-source-performance-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.
 - Materials for this final action can be accessed using Docket ID No. EPA-HQ-OAR-2021-0619.
- For further technical information about the final rules, contact Amanda Hansen, EPA's Office of Air Quality Planning and Standards, at (919) 541-3165 or hansen.amanda@epa.gov.