

FACT SHEET

Final Amendments to Air Toxics Standards for Iron and Steel Foundries

ACTION

- On June 25, 2020, the U.S. Environmental Protection Agency (EPA) finalized amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for major source Iron and Steel Foundries (promulgated in 2004 and amended in 2008) and the NESHAP for area source Iron and Steel Foundries (promulgated in 2008).
- Iron and steel foundries manufacture castings by melting metal in a furnace and then pouring the molten metal into a mold of a desired shape. Molded products are used in car engines, construction and machinery, among other uses.
- Following a residual risk and technology review (RTR) of the major source standards, and a technology review of the area source standards conducted under the Clean Air Act (CAA), EPA determined that risks from the major sources are acceptable and that no new cost-effective controls for major or area sources are available. The agency is not making any changes to the standards based on the results of the major source RTR and area source technology review.
- For consistency with recent court decisions, EPA is removing exemptions from the emissions limits for periods of startup, shutdown and malfunction. However, the agency recognizes it is technically infeasible for major sources to meet the emissions limit for volatile organic air toxics during some periods. During these periods, major sources must adhere to work practice standards to reduce emissions.
- EPA is revising the monitoring, recordkeeping and reporting provisions to require electronic reporting of performance test results.

RESIDUAL RISK ASSESSMENT

- For major sources, the CAA requires EPA to assess the risk remaining after implementation of the original technology-based air toxics emissions standards. This is known as a residual risk assessment.
- The maximum individual cancer risk for inhalation based on allowable emissions for the source category is estimated to be 50-in-1 million.
- Chronic inhalation noncancer risks for actual and allowable emissions were below a hazard index of one. A hazard index of one or lower means air toxics are unlikely to cause adverse noncancer health effects over a lifetime of exposure.
- Based on the completed risk assessment, available health information and associated uncertainties, EPA determined risks from the Iron and Steel Foundries source category to be acceptable and that the NESHAP provides an ample margin of safety to protect public health and prevents, considering relevant factors, an adverse environmental effect.

TECHNOLOGY REVIEW

- For both major and area sources, 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 major source and area source NESHAP for the Iron and Steel Foundries source category did not identify any developments that would further reduce air toxics emissions beyond the original NESHAP.

BACKGROUND

- The CAA requires EPA to regulate hazardous air pollutants, also known as air toxics, from categories of industrial facilities in two phases. The steps in these phases can be different depending if the facility is classified as a major source (emits at least 10 tons per year of any single air toxic or 25 tons per year of any combination of air toxics) or as an area source (any stationary source of air toxics that is not a major source).
- 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 maximum achievable control technology (MACT) standards are based on emissions levels that are already being achieved by the best-controlled and lower-emitting sources in an industry. For area sources, the technology-based standards are typically less strict, and usually reflect application of generally available control technology (GACT). However, there are some area source categories (such as Chromium Electroplating) for which EPA has promulgated MACT standards.
- Within eight 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 eight years after setting MACT and GACT standards, the CAA requires EPA to review and revise the standards, if necessary, to account for improvements in air pollution controls and prevention practices and technologies.

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/iron-and-steel-foundries-national-emissions-standards-hazardous-air>.
- Today's action and other background information are also available electronically at <https://www.regulations.gov/>, EPA's electronic public docket and comment system.
- For further technical information about the rule, contact Phil Mulrine at the EPA's Office of Air Quality Planning and Standards, at (919) 541-5289 or at mulrine.phil@epa.gov.