

FACT SHEET

Proposed Amendments to Air Toxics Standards for Integrated Iron and Steel Manufacturing

ACTION

- On July 12, 2023, the U.S. Environmental Protection Agency (EPA) proposed to amend the 2003 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel (I&S) Manufacturing Facilities, which was previously amended when EPA finalized the Residual Risk and Technology Review for this source category on July 23, 2020.
- These proposed amendments would reduce toxic metals by nearly 80 tons per year (tpy) and over 500 tpy of fine particle pollution, also known as PM_{2.5}.
- The Agency estimates over \$200 million in monetized benefits for PM_{2.5} alone, providing beneficial effects on air quality and public health for overburdened populations exposed to emissions from iron and steel facilities.
- In this action, EPA is proposing fenceline measurements for chromium – a good surrogate for other HAP metals, including arsenic – that will allow for the effective management of fugitive emissions of other HAP metals.
- On May 20, 2003, EPA issued the original air toxics standards for Integrated Iron and Steel Manufacturing Facilities and amended the rule on July 17, 2006.
- The amendments proposed in this action affect all facilities engaged in the production of steel from iron ore and includes the processes of sinter production, iron production and iron preparation (hot metal desulfurization).
- There are nine I&S Manufacturing facilities, owned by two entities.
- Following the technology review for the NESHAP, EPA is proposing:
 - Fenceline monitoring for chromium with an action level that, if exceeded, triggers a facility to analyze and take corrective action to lower emissions
 - Revised opacity limits for basic oxygen furnace (BOF) shop and blast furnace (BF) fugitives with additional work practices for BOF shops to help capture more fugitive emissions
 - New opacity limits for three specific unregulated fugitive sources from BF and BOF processes: planned BF bleeder valve openings, and BF and BOF slag, and BF bell leaks
 - New work practice standards for three specific unregulated fugitive sources from BF and BOF processes: unplanned BF bleeder valve openings, BF bell leaks, and BF beaching of iron. For unplanned openings, EPA is also proposing a limit of no more than five unplanned openings are allowed per year
 - Revising the current 20 percent opacity limit to 5 percent for the BOF shop and BF casthouse fugitive HAP metal emissions. Additionally, we are proposing specific work practice standards, such as optimizing positioning of hoods and using higher draft velocities to capture more fugitives for the BOF shop

- New emissions limits for five currently unregulated hazardous air pollutants (HAP) from sinter plants: carbonyl sulfide (COS), carbon disulfide (CS₂), mercury, hydrochloric acid (HCl), and hydrogen fluoride (HF); emissions limits are determined using a calculation method known as the upper prediction limit (UPL)
- New emissions limits based on the UPL for three unregulated HAP from BFs and BOFs: HCl, total hydrocarbons (THC) and dioxins/furans (D/Fs)
- New emissions limits based on the UPL for D/F and polycyclic aromatic hydrocarbons from sinter plants
- EPA will accept comment on the proposed amendments for 45 days after publication in the Federal Register.

TECHNOLOGY REVIEW

- The Clean Air Act (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 integrated iron and steel facilities did not identify developments that would further reduce HAP emissions from point sources.

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 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.
- Within eight years of setting 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 standards, the CAA requires that EPA review and revise the standards, if necessary, to account for developments in practices, processes or control technologies for reducing air pollution.
- After a court decision, *Louisiana Environmental Action Network v. EPA (LEAN)*, issued on April 21, 2020, EPA is required to address any unregulated emissions from a major source category when the Agency conducts the eight-year technology review.
- Therefore, with regard to the LEAN decision, we are proposing updates to the 2020 NESHAP for integrated iron and steel facilities, as part of the technology review, to address these gaps.

HOW TO COMMENT

- EPA will accept comment on the proposal for 45 days after publication in the *Federal Register*. Comments, identified by Docket ID No. EPA-HQ-OAR-2002-0083, may be submitted by one of the following methods:
 - Go to <https://www.regulations.gov/> and follow the online instructions for submitting comments.
 - Send comments by email to: *a-and-r-Docket@epa.gov*, Attention Docket ID No. EPA-HQ-OAR-2002-0083.
 - Fax your comments to: (202) 566-9744, Attention Docket ID No. EPA HQ OAR 2002 0083.
 - Mail your comments to: EPA Docket Center, Environmental Protection Agency, Mail Code: 28221T, 1200 Pennsylvania Ave., NW, Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2002-0083.
 - Deliver comments in person to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, DC. Note: In-person deliveries (including courier deliveries) are only accepted during the Docket's normal hours of operation. Special arrangements should be made for deliveries of boxed information.

FOR MORE INFORMATION

- To download a copy of the proposed rule notice, go to EPA's website at <https://www.epa.gov/stationary-sources-air-pollution/integrated-iron-and-steel-manufacturing-national-emission-standards>.
- Today's action notice and other background information are also available either electronically at <https://www.regulations.gov/>, the 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 Avenue, 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 proposed action can be accessed using Docket ID No. EPA-HQ-OAR-2002-0083.
- For additional 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*.