

FACT SHEET
Final Amendments to Air Toxics Standards for Taconite Iron Ore Processing

ACTION

- On January 31, 2024, the U.S. Environmental Protection Agency (EPA) finalized amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Taconite Iron Ore Processing Plants, strengthening existing emissions limits for harmful acid gases such as hydrogen chloride and hydrogen fluoride, and establishing new emission limits for mercury.
- The final NESHAP amendments would establish the first Clean Air Act limits on mercury from taconite iron ore facilities and are expected to reduce mercury emissions by about 33 percent -- or 247 pounds per year.
 - These reductions are expected to reduce the amount of mercury that deposits to water and land in the Great Lakes region, improving health protection for local communities, including Tribal Nations and low-income populations.
 - Mercury that deposits into waterbodies or land transforms to methylmercury, a powerful neurotoxin that bioaccumulates in fish and can harm humans who consume significant amounts of these fish, especially for unborn babies' growing brains and nervous systems.
- The final rule also will reduce hydrochloric acid emissions by about 72 percent, hydrofluoric acid emissions by about 29 percent, and particulate matter emissions by about 35 percent relative to baseline.
 - Exposure to hydrochloric acid and hydrofluoric acid emissions can cause irritation and inflammation of the respiratory tract in people, while scientific evidence shows that long- and short-term exposures to particulate matter can harm people's health, leading to heart attacks, asthma attacks, and premature death.
- EPA issued the initial air toxics standards for Taconite Iron Ore Processing on October 30, 2003. The rule applies to major source facilities engaged in separating and concentrating iron ore from taconite (a low-grade iron ore) to produce taconite pellets. These taconite pellets are then used as feed in blast furnaces to produce steel.
- There are eight facilities owned by two parent companies, with six facilities in Minnesota (MN) and two in Michigan (MI). One facility in MI is indefinitely idled.
- Following the technology review for the NESHAP, EPA is finalizing:
 - Revised emissions limits for acid gases based on the emissions levels achieved by the furnaces that utilize the superior control technology (wet controls), using a calculation method known as the upper prediction limit (UPL).
 - A new emission limit for mercury for new sources based on the UPL of the emissions levels achieved by the top performing furnace.

- A new emission limit for mercury based on the UPL of the emissions achieved by the top five performing furnaces for existing sources and allow facilities two compliance options: (1) demonstrate compliance with that UPL standard on a furnace-by-furnace basis, or (2) demonstrate compliance with a standard that is 7 percent stricter based on production-weighted average emissions from multiple existing furnaces at the facility.

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 taconite iron ore processing facilities did identify developments that would further reduce hazardous air pollutants (HAP) emissions beyond the original NESHAP. As a result, we are revising the emission limits for acid gases (i.e., hydrogen chloride and hydrogen fluoride).

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 standards reflect application of the maximum achievable control technology (MACT) and 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 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 review. Here, EPA must determine whether more health-protective standards are necessary.
- Every eight years after setting MACT standards, the CAA requires EPA to review and revise the standards, if necessary, to account for improvements in air pollution controls and/or prevention.
- After the *Louisiana Environmental Action Network v. EPA* (LEAN) court decision issued on April 21, 2020, EPA is required to address any unregulated emissions from a major source category when the Agency conducts the 8-year technology review.

- Therefore, with regard to the LEAN decision, we are updating the 2020 NESHAP for taconite facilities as part of the technology review to address previously unregulated emissions (i.e., emission limits for mercury).

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/taconite-iron-ore-processing-national-emission-standards-hazardous>
- 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, or in hardcopy at the EPA Docket Center's Public Reading Room.
 - The Public Reading Room is located at EPA Headquarters Library, room number 3334 in the WJC West Building, 1301 Constitution Ave., 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 final action can be accessed using Docket ID No. EPA-HQ-OAR-2017-0664.
- For further technical information about the rule, contact David Putney, EPA's Office of Air Quality Planning and Standards, at (919) 541-2016 or putney.david@epa.gov.