FACT SHEET

Proposed Amendments to Air Toxics Standards for Primary Copper Smelting

ACTION

- On December 22, 2021, the U.S. Environmental Protection Agency (EPA) proposed to amend the 2002 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Copper Smelting major sources and the 2007 NESHAP for Primary Copper Smelting area sources.
- The Primary Copper Smelting source category includes two major source facilities and one area source facility. The elevated cancer risks associated with emissions from the major source category disproportionately affect communities with environmental justice concerns, including low-income residents, Native Americans, and Hispanics living near these facilities.
- The 2002 major source rule includes particulate matter emission limitations and work practice standards for copper concentrate dryers, smelting furnaces, slag cleaning vessels, and copper converter departments. The major source rule also includes a requirement for smelters with baghouses to use bag leak detection systems.
- The 2007 area source rule includes particulate matter emission limitations and work practice standards for copper concentrate dryers, smelting vessels, converting vessels, matte drying and grinding, secondary gas systems, and anode refining departments.
- Following a residual risk and technology review conducted under the Clean Air Act (CAA), EPA is proposing amendments that would enhance the effectiveness of the major source standards by adding new standards for previously unregulated sources, and improving compliance and implementation. Specifically, EPA is proposing to:
    - Add new standards for particulate matter (as surrogate for hazardous air pollutants [HAP] metals) that would apply to anode refining furnace point source emissions and roofline emissions from anode refining furnaces, smelting furnaces, and converters;
    - Add new mercury standards for a combination of point source emissions from the converters, smelting furnaces, and anode refining;
    - Add new work practice standards for fugitive dust control;
    - Revise requirements for periods of startup, shutdown and malfunction to be consistent with recent court decisions; and
    - Require electronic reporting.
- Following a technology review conducted under the CAA for the area source, EPA is proposing the following minor amendments to the area source standards:
    - Revise requirements for periods of startup, shutdown and malfunction to be consistent with recent court decisions; and
    - Require electronic reporting.
- EPA will accept comment on the proposed amendments for 45 days after publication in the *Federal Register*.

RESIDUAL RISK ASSESSMENT

- The CAA requires EPA to assess the risk remaining after application of the final technology-based air toxics emissions standard. This is known as a residual risk assessment.
- Facilities in this source category mainly emit lead, arsenic, and other HAP metals.
- EPA is proposing to conclude that risks due to HAP emissions from the major source category are unacceptable largely based on modeled lead concentrations exceeding the lead National Ambient Air Quality Standards, along with elevated acute noncancer risks due to arsenic.
- In response to the risk findings, EPA is proposing new standards for process fugitive emissions from anode refining roofline vents and work practices to minimize fugitive dust emissions, which will achieve acceptable risks and protect human health with an ample margin of safety.

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.
- As a result of the technology review of the Primary Copper Smelting source standards, EPA did not identify any cost-effective developments that would further reduce air toxics emissions beyond those standards being proposed under the risk review.

BACKGROUND

- The CAA requires EPA to regulate hazardous 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 8 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 8 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 prevention.

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-2020-0430, 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-2020-0430.
- Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform.
    - We encourage the public to submit comments via https://www.regulations.gov/ or email, as there may be a delay in processing mail and faxes. Hand deliveries and couriers may be received by scheduled appointment only.
    - For further information on EPA Docket Center services and the current status, please visit us online at https://www.epa.gov/dockets.
    - For additional information, including the full EPA public comment policy, please visit https://www.epa.gov/dockets/commenting-epa-dockets.

FOR MORE INFORMATION

- Interested parties can download a copy of the proposed rule notice from EPA's website at the following addresses: https://www.epa.gov/stationary-sources-air-pollution/primary-copper-smelting-area-sources-national-emissions-standards and https://www.epa.gov/stationary-sources-air-pollution/primary-copper-smelting-national-emissions-standards-hazardous-air
- 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 proposed action can be accessed using Docket ID No. EPA-HQ-OAR-2020-0430.
- For further technical information about the rule, contact Tonisha Dawson, EPA's Office of Air Quality Planning and Standards, at (919) 541-1454 or dawson.tonisha@epa.gov.