

## FACT SHEET

### Proposed Amendments to Air Toxics Standards for Primary Copper Smelting

#### ACTION

- On July 13, 2023, the U.S. Environmental Protection Agency (EPA) proposed to update and expand the 2022 proposal of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Risk and Technology Review (RTR) for Primary Copper Smelting major sources (subpart QQQ).
- The Primary Copper Smelting source category includes two major sources.
- The 2022 proposal of subpart QQQ proposed particulate matter emission limitations, as a surrogate for metal hazardous air pollutants (HAP), for anode refining point sources; roofline vents of smelting furnaces, converters and anode refining operations; new converters; and mercury limits for any combination of vents from copper concentrate dryers, converting department, the anode refining department, and the smelting vessels.
- Since the issuance of the 2022 proposal, the EPA has obtained additional information that impacts the decisions made for certain amendments in the 2022 proposed RTR and that indicates there are additional unregulated HAP for the source category.
- Based on the EPA's review of additional information, EPA is now proposing amendments that would enhance the effectiveness of the major source standards by improving compliance and implementation. Specifically, EPA is proposing to:
  - Revise the standards for particulate matter (PM) – as a surrogate for HAP metals – that would apply to anode refining furnace point source emissions and roofline emissions from anode furnaces, smelting furnaces, and converters by changing from individual roofline PM standards to a combined roofline PM standard.
  - Revise the standards that apply to the secondary converter emissions and anode baghouse emissions.
  - Revise the mercury standards for a combination of point source emissions from the converters, smelting furnaces, and anode refining to account for new mercury test data.
  - Add HAP standards for the following pollutants: benzene, toluene, hydrogen chloride (HCl), chlorine, polycyclic aromatic hydrocarbons (PAH), naphthalene and dioxin/furans (D/F).
- This action also presents minor revisions to the residual risk assessment estimates in the 2022 proposal, but the risk review decisions have not changed.
- EPA will accept comment on the proposed amendments for 45 days after publication in the *Federal Register*.

## **RESIDUAL RISK ASSESSMENT**

- The Clean Air Act (CAA) requires EPA to assess the risk remaining after application of the final air toxics emissions standard. This is known as a residual risk assessment.
- Facilities in this source category mainly emit lead, arsenic, other HAP metals and organic HAP.
- EPA is proposing to conclude that even after reviewing the additional emissions data that was submitted following the 2022 proposal, the risks due to HAP emissions from the major source category remain unacceptable at the baseline largely based on modeled lead concentrations exceeding the lead National Ambient Air Quality Standards, along with elevated acute noncancer risks due to arsenic.
- However, the proposed new and revised standards described above would reduce the risks to acceptable levels and ensure the NESHAP provides 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 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 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.
- Fax your comments to: (202) 566-9744, Attention Docket ID No. EPA-HQ-OAR-2020-0430.
- 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-2020-0430.
- 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 Center's normal hours of operation. Special arrangements should be made for deliveries of boxed information.

#### **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 electronically at <https://www.regulations.gov/>, EPA's electronic public docket and comment system.
  - The Public Reading Room is located at the EPA Headquarters library, room number 3334 in the EPA 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-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](mailto:dawson.tonisha@epa.gov).