FACT SHEET

FINAL AMENDMENTS TO THE AIR TOXICS STANDARDS FOR PRIMARY ALUMINUM PRODUCTION

ACTION

- On September 10, 2015, the Environmental Protection Agency (EPA) promulgated final amendments to the air toxics standard covering the Primary Aluminum Production source category.
- This final rule amends the initial 1997 rulemaking published in the *Federal Register*.
- The standards currently apply to 11 facilities in nine states: Indiana, Kentucky, Louisiana, Missouri, New York, South Carolina, Texas, Washington and West Virginia. These facilities produce aluminum from refined bauxite ore, using an electrolytic reduction process in a series of cells, or pots, called "potlines." The two main potline types are prebake and Soderberg. Soderberg potlines are an older technology and have higher emissions than prebake potlines.
- After the publication of the December 2011 proposal and taking into account comments from the industry and environmental groups, the EPA gathered new emission data and conducted an updated risk assessment and issued a supplemental proposal in December 2014.

- This action finalizes:
    - Standards for:
        - particulate matter (PM) (as a surrogate for metal hazardous air pollutants (HAP) other than mercury (Hg)) from new and existing potlines, anode bake furnaces and paste production plants;
        - polycyclic organic matter (POM) emissions from new and existing prebake potlines and existing pitch storage tanks;
        - carbonyl sulfide (COS) emissions from new and existing potlines;
        - Hg emissions from anode bake furnaces and potlines;
        - polychlorinated biphenyls (PCB) emissions from potlines and anode bake furnaces; and
        - dioxin and furan (D/F) emissions from Soderberg potlines.
    - Work practices for potlines, anode bake furnaces and paste production plants.
    - Risk-based standards for POM, arsenic (As) and nickel (Ni) emissions from Soderberg potlines.
    - Additional monitoring requirements for primary control devices.

- Facilities must comply with these requirements:
    - Upon startup for new sources subject to the primary aluminum production air toxics standards, as amended.

- Upon promulgation for existing sources subject to the malfunction provisions and the electronic reporting provisions.

- One year after date of promulgation for existing potlines subject to COS emissions limits; for existing potlines, anode bake furnaces and paste production plants subject to work practice standards; existing anode bake furnaces and paste production plants subject to PM emissions limits; and existing Soderberg potlines subject to PCB emissions limits.

- Two years after date of promulgation for existing prebake potlines subject to POM and PM emissions limits; existing pitch storage tanks subject to POM equipment standards; existing anode bake furnaces subject to Hg emissions limits and existing Soderberg potlines subject to risk-based POM, Ni and As emissions limits.

Technology Review

- The Clean Air Act requires EPA to review and revise air toxics standards, as necessary, taking into account developments in practices, processes and control technologies since EPA issued the standards.
- The technology review did not identify any new developments in practices, processes or control technologies that are applicable to this source category.

Residual Risk Assessment

- The Clean Air Act requires EPA to assess the risk remaining after application of the air toxic standards. This is known as a residual risk assessment.
- The residual risk assessment includes the following analyses:
  - Estimates of individual source category risk.
  - Analysis of air toxics related risks across different social, demographic and economic groups living near the facilities.
  - Risk estimates based on the actual emissions reported as emitted.
  - Risk estimates based on emissions allowed by the current air toxics standard.
- Results of the Residual Risk Assessments:
  - In December 2011, the EPA determined risks were acceptable and the proposed standards for POM and COS would ensure that public health was protected.
  - However, in December 2014, after gathering additional data and conducting a refined multipathway risk assessment, the EPA concluded risks were unacceptable due to potential emissions of As, Ni and POM from the one idle Soderberg facility.

- Subsequently, the owner of the idle Soderberg facility announced the permanent shut down of that facility in March 2015. Therefore, the EPA now concludes the revised baseline risks, after accounting for closure of the Soderberg facility, are acceptable.

- EPA concluded that there are no disproportionate related risks across different social, demographic and economic groups living near the primary aluminum facilities.

- Once the final standards are in place, the public health and environment will be protected with an ample margin of safety.

Startup, Shutdown and Malfunction Provisions

- The final amendments eliminate the exemptions to emission limits and standards during periods of startup, shutdown and malfunction to ensure the standards are consistent with the District of Columbia Circuit Court's vacatur of similar provisions in other rules.
- Due to the infeasibility of monitoring fugitive potline emissions during startup periods, the EPA has promulgated work practice standards.

- During all other periods, the numerical emission limits will apply.

BACKGROUND

- The Clean Air Act requires the EPA to regulate hazardous air pollutants, also known as air toxics, from large industrial facilities in two phases.
- The first phase is "technology-based," where the EPA develops Maximum Achievable Control Technology (MACT) standards for controlling the emissions of air toxics from sources in an industry group (or "source category"). These MACT standards are based on emissions levels that are already being achieved by the controlled and low-emitting sources in an industry group.
- Within 8 years of setting the MACT standards, the Clean Air Act directs the 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, the EPA must determine whether more health-protective standards are necessary.
- Also, every 8 years after setting the MACT standards, the Clean Air Act requires that the EPA review and revise the MACT standards, if necessary, to account for improvements in air pollution controls and/or prevention.

- The previously-issued air toxic standards for these production processes are part of 96 air toxic standards (MACT) that require 174 industry sectors to eliminate 1.7 million tons of 187 toxic air pollutants. Congress listed these toxic air pollutants in the Clean Air Act.

FOR MORE INFORMATION

- Interested parties can download the notice from the EPA's website at the following address: http://www.epa.gov/ttn/atw/alum/alumpg.html.

- Today's final rule and other background information are also available either electronically at http://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 in the EPA Headquarters Library, Room Number 3334 in the EPA WJC West Building, located at 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 final action can be accessed using Docket ID Number EPA-HQ-OAR-2011-0797.

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