FACT SHEET

Final Amendments to Air Toxics Standards for Hydrochloric Acid Production

ACTION

- On March 12, 2020, the US. Environmental Protection Agency (EPA) finalized amendments to the 2003 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hydrochloric Acid (HCl) Production located at major sources of air toxics.
- HCl is used in a variety of industrial processes including: refining ore for the production of tin and tantalum, pickling and cleaning of metal products, electroplating, cleaning boilers, neutralizing chemically basic systems, manufacturing fertilizers, dyes, textiles and rubber, and preparing various food products. HCl is also used as a laboratory reagent.
- Following a residual risk and technology review (RTR) conducted under the Clean Air Act (CAA), EPA determined that risks from the source category are acceptable and that no new cost-effective controls are available. The agency is not making any changes to the standards based on the results of the RTR.
- EPA is, however, finalizing minor amendments to enhance the effectiveness of the standards by improving compliance and implementation. Specifically, EPA is:
  - revising requirements for periods of startup, shutdown and malfunction (SSM) to be consistent with recent court decisions, including a work practice requirement for planned periods of vent maintenance; and
  - requiring electronic reporting of performance test results and compliance reports.

RESIDUAL RISK ASSESSMENT

- The 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.
- Based on the completed risk assessment, available health information and associated uncertainties, EPA determined risks from the HCl Production source category are acceptable and that the NESHAP provides an ample margin of safety to protect public health. The HCl NESHAP applies to specific types of equipment and processes at a facility. Many facilities also are subject to more than one NESHAP.

<u>Facility-Wide Risks</u>

- As part of its review, EPA assessed facility-wide risks, which include risks from the HCl Production source category, as well as other co-located source categories that emit air toxics, like pesticide or organic chemical manufacturing.
- EPA estimated that the maximum facility-wide cancer risk is 600-in-1 million. This estimated risk is caused by ethylene oxide emissions from a variety of industrial processes that are not part of the HCl Production source category. In this assessment, EPA used its 2016 updated toxicity value for ethylene oxide.
- EPA is taking a two-pronged approach to address ethylene oxide emissions.

1. *Reviewing CAA regulations for facilities that emit ethylene oxide*.
   EPA will review and, as appropriate, revise CAA regulations for facilities that emit ethylene oxide – starting with the NESHAP for Miscellaneous Organic Chemical Manufacturing facilities and the NESHAP for Commercial Sterilizers. On December 17, 2019, EPA published proposed amendments to the NEHSAP for Miscellaneous Organic Chemical Manufacturing facilities, some of which emit ethylene oxide (for more information, see https://www.epa.gov/stationary-sources-air-pollution/miscellaneous-organic-chemical-manufacturing-national-emission). And on December 12, 2019, EPA published an advance notice of proposed rulemaking to solicit information on various strategies for reducing ethylene oxide emissions from commercial sterilizers (for more information, see https://www.epa.gov/stationary-sources-air-pollution/ethylene-oxide-emissions-standards-sterilization-facilities).
2. *Working with state air agencies to gather additional information on ethylene oxide emissions.*
   EPA is working closely with state and local air agencies to get additional information on facility emissions to determine whether more immediate emission reduction steps are necessary or possible in any particular location. This work is ongoing.

TECHNOLOGY REVIEW

- The CAA also requires EPA to assess, review and revise air toxics standards, as necessary, considering developments in practices, processes and control technologies.
- The technology review of the standards for facilities with HCl production did not identify any developments that would further reduce toxic air pollutant emissions beyond the original NESHAP.

OTHER AMENDMENTS

- EPA is removing the exemption from meeting the standards during periods of SSM to be consistent with a 2008 court decision and clarifying that the standards are applicable at all times. EPA is adding a work practice requirement for planned periods of vent maintenance.
- EPA is requiring electronic submittal of required performance tests and compliance reports through EPA's Central Data Exchange using the Compliance and Emissions Data Reporting Interface.

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.

- The CAA directs EPA to, within eight years of setting the MACT standards, 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 practices and technologies.

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/hydrochloric-acid-production-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 the EPA Headquarters library, WJC West Building, Room Number 3334, 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 action can be accessed using Docket ID No. EPA-HQ-OAR-2018-0417.
- For further technical information about the rule, contact Nathan Topham, EPA's Office of Air Quality Planning and Standards, at (919) 541-0483 or *topham.nathan@epa.gov*.