

FACT SHEET

Final Amendments to Air Toxics Standards for Mercury Cell Chlor-Alkali Plants

ACTION

- On April 29, 2022, the US. Environmental Protection Agency (EPA) finalized amendments to the 2003 National Emission Standards for Hazardous Air Pollutants (NESHAP) Mercury Cell Chlor-Alkali Plants.
- The amendments will provide clarifications, corrections and improve compliance and reduce emissions of hazardous air pollutants.
- Mercury cell chlor-alkali plants produce chlorine and caustic using mercury cells. Caustic is used to neutralize acidic compounds.
- Following a residual risk and technology review (RTR) conducted under the Clean Air Act (CAA), EPA is finalizing amendments to:
 - Prohibit mercury emissions from existing mercury cell chlor-alkali plants within three years;
 - Amend the requirements for cell room fugitive mercury emissions to require work practice standards for the cell rooms and instrumental monitoring of cell room fugitive mercury emissions during the period of time before they eliminate the emissions of mercury;
 - Add standards for fugitive chlorine emissions from mercury cell chlor-alkali plants, which are not currently covered in the 2003 NESHAP;
 - Correct and clarify regulatory provisions related to emissions during periods of startup, shutdown and malfunction (SSM), including proposing to eliminate exemptions during periods of SSM; and
 - Require facilities to submit electronic copies of notification of compliance status reports and electronic copies of performance test results and reports.

RESIDUAL RISK ASSESSMENT

- The CAA requires EPA to assess the risk remaining after application of the final air toxics standards. This is known as a residual risk assessment.
- The maximum individual cancer risk for inhalation is estimated to be less than 1-in-1 million for the Mercury Cell Chlor-Alkali Plants source category.
- Based on the completed risk assessment, available health information and associated uncertainties, EPA determined risks from mercury cell chlor-alkali plants to be acceptable and provide an ample margin of safety to protect public health.

TECHNOLOGY REVIEW

- The CAA also requires EPA to assess, review and revise the air toxics standards as necessary, taking into account developments in practices, processes and control technologies since the standards were first issued.

- The conclusions of our technology review and our beyond-the-floor MACT determination resulted in a prohibition of mercury emissions from existing mercury cell chlor-alkali plants within 3 years.
- The technology review for mercury cell chlor-alkali plants also identified cost-effective developments that include implementing a combination of continuous cell room mercury monitoring and work practices for mercury for the period of time before the prohibition of mercury deadline comes into effect.
- In addition, pursuant to a recent court decision regarding the need to fill regulatory gaps as part of the required technology review, we are finalizing work practice standards to address fugitive chlorine emissions.

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 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 that EPA review and revise the standards, if necessary, to account for improvements in air pollution controls and/or prevention.

FOR MORE INFORMATION

- To download a copy of the final rule notice, go to EPA’s website at <https://www.epa.gov/stationary-sources-air-pollution/mercury-cell-chloralkali-plants-national-emissions-standards>.
- Today’s action and other background information are available electronically at <https://www.regulations.gov/>, EPA’s electronic public docket and comment system.
 - Materials for this final action can be accessed using Docket ID No. EPA-HQ-OAR-2020-0560.
- For further technical information about the rule, contact Phil Mulrine, EPA's Office of Air Quality Planning and Standards, Sector Policies and Programs Division, at (919) 541-5289 or mulrine.phil@epa.gov.