

FACT SHEET

FINAL AMENDMENTS TO THE AIR TOXICS STANDARDS FOR THREE CHEMICAL SECTOR SOURCE CATEGORIES

ACTION

- On September 16, 2014, the U.S. Environmental Protection Agency (EPA) promulgated changes to two air toxics standards that cover three industrial source categories in the chemical manufacturing industry.
- The sources categories covered under this rulemaking include:
 - Acrylic and Modacrylic Fibers Production
 - Current standards issued 06/29/1999
 - 1 active facility
 - Facilities that manufacture acrylic and modacrylic fibers used in textiles (including apparel, carpet, awnings, tents, sandbags and auto upholstery) and in industrial applications like concrete reinforcements and industrial filters
 - Polycarbonate Production
 - Current standards issued 06/29/1999
 - 4 active facilities
 - Facilities manufacture polycarbonates, which are a thermoplastic polymer that can be either transparent or opaque, are heat resistant and are scratch and impact resistant. These properties make polycarbonates useful in a variety of applications, including as a dielectric in capacitors, car headlights, water bottles, sports helmets, compact discs and DVDs, eyewear lenses, medical devices, toys and other products
 - Amino/Phenolic Resins Production
 - Current standards issued 01/20/2000
 - 19 active facilities
 - Facilities manufacture amino resins or phenolic resins, which can broadly be classified as formaldehyde-based thermosetting resins; these resins are used in the manufacture of plywood, particle board, adhesives, wood furniture and plastic parts

REVIEW OF AIR TOXIC STANDARDS

- The EPA conducted the following reviews for each of the source categories included in the final rule:
 - **Technology Review:** To determine if there have been advances in practices, processes or control technologies since the EPA issued the standards.
 - **Residual Risk Assessment:** To determine whether additional emission reductions are warranted to protect public health and the environment
- The EPA also addressed:
 - **Unregulated Emission Points:** To identify and address significant unregulated emission points.
 - **Corrections and Clarifications**
 - **Start-up and Shut-down Provisions:** To address the vacatur of the startup, shutdown and malfunction provisions for air toxics standards.

Technology Review

- The Clean Air Act requires the EPA to review and revise air toxics standards, as necessary, taking into account developments in practices, processes and control technologies since issuance of the standards.
- The EPA identified that it is cost effective to make the leak detection and repair (LDAR) programs more stringent for facilities in the Acrylic and Modacrylic Fiber and Polycarbonate Production source categories. Therefore, the EPA is revising the existing standards to require that the facilities in these two source categories comply with more stringent LDAR program requirements as a result of the technology review.
- The EPA identified that it is cost effective to make the storage vessel size and vapor pressure thresholds more stringent for new facilities in the Amino/Phenolic Resins source category. Therefore, the EPA is revising the existing standards to require that new facilities in this source category comply with more stringent size and vapor pressure thresholds for storage vessel control as a result of the technology review.

Residual Risk Assessments

- The Clean Air Act requires the EPA to assess the risk remaining after application of the final air toxic standard. This is known as a residual risk assessment.
- The residual risk assessment includes the following analyses:
 - Estimates of individual source category risk,
 - Risk estimates from all air toxics emissions at a facility (“total facility risk”),
 - Risk estimates based on the actual emissions reported as emitted, and
 - Risk estimates based on emissions allowed by the current air toxics standard.
- The risk assessments found that the air toxics standards for all three source categories provide an acceptable risk, and that no further risk reduction is required to provide an ample margin of safety to address residual risk. Therefore, the EPA is not revising the existing air toxics standards as a result of the residual risk reviews.
 - For each of these source categories, the cancer risk is no greater than 20-in-1 million. Based on consideration of this risk, as well as other risk considerations, the EPA has determined that the risks are acceptable for all three source categories.
 - The EPA did not identify any of the controls evaluated in the technology review that would further reduce risks beyond the level achieved by the current emission standards. Therefore, the EPA is concluding that no additional controls are necessary to protect public health with an ample margin of safety.
 - Non-cancer and acute risks to humans, as well as risks to the environment, for these source categories are low.

Start-up, Shutdown, and Malfunction Provisions

- The final amendments eliminate the exemptions to emissions 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.
- The final amendments also require that facilities monitor atmospheric releases from pressure relief devices, as releases from these devices occur as a result of malfunctions.

Unregulated Emission Points

- The EPA is finalizing amendments to reduce emissions from previously unregulated emission points in the acrylic and modacrylic fibers and amino/phenolic resins source categories.
 - For the existing source in the acrylic and modacrylic fibers source category, the EPA is establishing an emission limit for certain fiber spinning lines.
 - For existing sources in the amino/phenolic resins source category, the EPA is establishing emission standards for storage vessels and continuous process vents.

Compliance Dates

- The final amendments require facilities to comply immediately with the revised spinning line and startup, shutdown, and malfunction revisions.
- The final amendments allow facilities up to 1 year to comply with the revised equipment leak provisions.
- The final amendments allow facilities up to 3 years to comply with the new continuous process vent, storage vessel, and pressure relief device monitoring requirements.

BACKGROUND

- The Clean Air Act requires the EPA to regulate toxic air pollutants, also known as air toxics, from large industrial facilities in two phases.
- The first phase is “technology-based,” where the 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 better-controlled and lower-emitting sources in an industry.
- 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 standards, if necessary, to account for improvements in air pollution controls and/or prevention.
- The previously-issued air toxic standards for these three production processes are three 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 web site at the following address: <http://www.epa.gov/ttn/atw/amino/aminopg.html> or <http://www.epa.gov/ttn/atw/gmact/gmactpg.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, 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 action can be accessed using Docket ID No. EPA-HQ-OAR-2012-0133.
- For further information contact Nick Parsons of the EPA's Office of Air and Radiation by phone at (734) 214-4479 or by e-mail at parsons.nick@epa.gov.