EPA National Environmental Justice Community Engagement Call

Expanding the Conversation



environmental

MARCH 19, 2024



En Español

Tenemos interpretación en español disponible para aquellos que prefieren escuchar en español.

- Cómo cambiar el canal de audio en español
- Las personas pueden agregar preguntas en español al módulo de preguntas y respuestas
- Los materiales de la reunión estarán disponibles en español.



Spanish-language interpretation is available for those who prefer to listen in Spanish.

- How to switch to Spanish language audio channel
- Individuals can add questions in Spanish to the Q&A Pod
- Meeting materials will be made available in Spanish.

MINDFULNESS MOMENT



Presentation on Ethylene Oxide: Final EPA Actions to Reduce Risk at Commercial Sterilization Facilities





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EPA action reduces EtO Emissions from Commercial Sterilizers by 90%

Slashes emissions of toxic air pollution

- Requires facilities to install available and proven technologies, practices, and procedures which have been demonstrated to significantly reduce EtO emissions.
- Will result in a 90 percent reduction in EtO emissions from commercial sterilizers nationwide.

Significantly reduces cancer risks

• Will reduce the lifetime cancer risk for people living near all commercial sterilization facilities.

Key Elements

- Requiring all commercial sterilizers (about 90 facilities) to control currently uncontrolled sources of EtO, including "room air" emissions
- Tough standards for new and existing stack emissions
- Increased requirements for continuous monitoring at the facility

Requires Air Pollution Control Equipment to be Monitored Continuously

Requires accountability and transparency

- Continuous monitoring to prove effectiveness
- Quarterly reporting requirements

• Ensures a safe supply of medical devices for patients and hospitals

- In coordination with FDA
- Process brings facilities into compliance and minimizes any potential impacts to the medical device supply chain while also ensuring emission reductions for communities.

Partnerships:

- Federal Agencies: FDA, ATSDR, OSHA, and others
- State and Local Partners and Air Agencies
- Additional Stakeholders

What is Ethylene Oxide?

- Gas
- Colorless
- Odorless

(in concentrations we see in communities)





EtO Uses





• Sterilizes

Makes Other Products







Location of EtO Commerical Sterilizers in the U.S.



Where EtO Comes from at the Facility

There are two types of EtO emissions from facilities:



Room Air Emissions





Reducing Emissions & Risk Through the Clean Air Act

- 1. Capture and control room air emissions.
- 2. Tougher standards for new and existing stack emissions.
- Improved accountability through source monitoring.

Address emissions at nearly 90 commercial sterilization facilities that are owned and operated by approximately 50 companies

Key Changes from 2023 Proposal to 2024 Final Regulation

- Compliance time maximized
 - Highest emitting facilities (using more than 60 tons of EtO per year) must comply more quickly under CAA requirements.
- Alternative best management practice
- Percentage-based emission standards
- Title V permitting
- Warehouses and distribution centers

Compliance Deadline Requirements

EtO used per year (tons)	Compliance Deadline	Number of Facilities
More than 60 tons	2 years	28
Between 1 and 60 tons	2 to 3 years	39
Less than 1 ton	3 years	21

Note: Facilities will have an additional 180 days to demonstrate compliance. Also, the Clean Air Act provides that, for certain standards (i.e., those established under section 112(d)), facilities can apply for a 1-yr extension.





Integrated Iron & Steel

Final National Emission Standards for Hazardous Air Pollutants (NESHAP)

National EJ Community Engagement Call

March 19, 2024

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Background

Integrated Iron and Steel

- Clean Air Act requires EPA to regulate hazardous air pollutants (HAPs) from categories of industrial facilities in two phases: initially based on Maximum Achievable Control Technology (MACT), and then conduct a Risk and Technology Review (RTR) within 8 years of MACT standards
- Some examples of HAPs regulated in this final rule include:



- The initial MACT standards were finalized in 2003.
- EPA completed the risk review, and a partial technology review, in 2020.
- Then, on March 11, 2024, the EPA completed the technology review, including addressing remaining unregulated HAPs, as required by a recent Court decision.

Geographic Distribution of Integrated Iron and Steel Facilities

EPA's current facility list includes a total of 10 operating units, however only 8 are active:

- 1. Cleveland Cliffs Middletown, OH
- 2. Cleveland Cliffs Burns Harbor, IN
- 3. Cleveland Cliffs Cleveland, OH
- 4. Cleveland Cliffs East Chicago, IN
- 5. Cleveland Cliffs Dearborn, MI
- 6. U.S. Steel Braddock, PA
- 7. U.S. Steel Gary, IN
- 8. U.S. Steel Granite City, IL





Integrated Iron and Steel

In this final rulemaking, EPA:

Completed the technology review required under the Clean Air Act

Established new standards for previously unregulated hazardous air pollutants (HAP) and emission points that EPA is required to regulate pursuant to a Court decision.

EPA is finalizing:

Fenceline monitoring for chromium

Stack limits, based on using activated carbon injection (ACI) controls for dioxins/furans, Polycyclic Aromatic Hydrocarbons (PAH) and mercury (Hg) at sinter plants

Stack limits and work practices for HAP from sinter plants, Blast Furnace (BF) stoves, Basic Oxygen Process Furnaces (BOPF), and BF casthouses

Fugitive emissions standards for planned and unplanned BF bleeder valve openings, BF bell leaks, BF and BOPF slag processing and BF beaching

Work practices for BOPF fugitive emissions

Integrated Iron and Steel

This final rulemaking provides:

Additional controls on sinter plants, which will achieve significant reductions of three highly toxic, persistent, bioaccumulative HAP (PB-HAP)

New limits on chromium at the fenceline, which will provide protection at ground levels close to neighboring communities

New limits on unregulated HAP emissions from stacks and unregulated fugitive emissions from processes

For More Information on this Final Rule



Contacts

For questions related to the rulemaking

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FACT SHEET

Final Amendments to Air Toxics Standards for

Gasoline Distribution and Final Updates for Bulk Gasoline Terminals

ACTION

- On February 29th, 2024, the U.S. Environmental Protection Agency (EPA) issued final amendments to the Gasoline Distribution National Emission Standards for Hazardous Air Pollutants (NESHAP), including both major and area source categories. In addition, EPA is issuing final updates to the New Source Performance Standards (NSPS) for Bulk Gasoline Terminals.
- Following NESHAP technology reviews and NSPS review, EPA is finalizing:

 Volatile organic compound (VOC) emission limits, in a new subpart (XXa), for the bulk gasoline terminal NSPS, at affected facilities that commence construction, reconstruction, or modification after June 10, 2022;
 - Lower loading rack emission limits;
 - Strengthened cargo tank vapor-tightness requirements;
 - o Additional storage tanks controls for major and area source NESHAP;
 - Instrument monitoring to detect equipment leaks;
 - Monitoring and operating requirements for control devices, including associated recordkeeping and reporting requirements;
 - Electronic submission of compliance reports;
 - Removal of startup, shutdown, and malfunction exemptions and requiring that the standards always apply; and
 - Minor technical improvements.
- The affected sources include the following emission points: storage tanks, loading
 operations, and equipment leaks. This action does not include gas stations.
- EPA has determined that none of the rules in this final action will have significant economic impacts on a substantial number of small entities, including small businesses. In addition, EPA's economic models indicate this action will result in a negligible increase in the price of gasoline of less than two hundredths of a cent per gallon
- EPA estimates this final action will reduce hazardous air pollutant emissions from gasoline distribution facilities by 2,200 tons per year and VOC emissions by 45,400 tons per year. Hazardous air pollutants are also known or suspected to cause cancer and other serious health effects. They are also called "air toxics."
- Approximately 210 major source gasoline distribution facilities are subject to the major source NESHAP and approximately 9,260 area sources are subject to the area source NESHAP.

- Facilities that emit more than 10 tons a year of a single air toxic, or 25 tons a year of a combination of air toxics, are considered major sources. Area sources are facilities that emit below these amounts.
- The air toxics emitted by Gasoline Distribution sources are benzene, hexane, toluene, xylene, ethylbenzene, 2,2,4-trimethylpentane, cumene, and napthalene.
- The gasoline distribution facilities covered by these final actions are:
 - Bulk gasoline terminal: Any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater. In the NSPS and major source NESHAP, the throughput is greater than 20,000 gallons per day.
 - Bulk gasoline plant: For the area source NESHAP, any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank, and subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities and has a gasoline throughput of less than 20,000 gallons per day.
 - Pipeline breakout station: For the NESHAP, a facility along a pipeline containing storage vessels used to relieve surges or receive and store gasoline from the pipeline for re-injection and continued transportation by pipeline or to other facilities.
 - Pipeline pumping station: For the area source NESHAP, a facility along a pipeline containing pumps to maintain the desired pressure and flow of product through the pipeline, and not containing gasoline storage tanks other than surge control tanks.
 - Gasoline distribution facilities: Facilities where gasoline from pipelines, ships, barges, or cargo tanks is loaded into storage tanks. The gasoline remains in storage tanks until it is loaded into cargo tanks to be transported elsewhere.

TECHNOLOGY AND NSPS REVIEWS

- The Clean Air Act requires EPA to assess, review and revise air toxics standards, as
 necessary, taking into account developments in practices, processes, and control
 technologies no less often than every 8 years. The technology review of the standards
 for gasoline distribution facilities identified several developments that would further
 reduce emissions beyond the original NESHAP.
- The Clean Air Act also requires EPA to review and revise, as necessary, the NSPS at least
 every eight years. EPA's review of the current bulk gasoline terminals NSPS focused on
 whether there were any emission reduction techniques that were used in practice that
 achieved greater emission reductions than those currently required and whether any of
 these techniques have become the best system of emission reduction (BSER). EPA
 determined that there are emission reduction techniques used in practice that achieve
 greater emission reductions than those currently required by the NSPS for bulk gasoline
 terminals.

BACKGROUND

- In 1983, EPA issued the NSPS for Bulk Gasoline Terminals (NSPS subpart XX). These standards required all new, modified, and reconstructed bulk gasoline terminals to control emissions of VOCs to the level achievable by the best demonstrated system of continuous emission reduction, considering costs, health, and environmental and energy impacts.
- In 1994, EPA issued the initial air toxics standards for major sources (subpart R) and later reviewed and maintained them in 2006. In 2008, EPA issued standards for area sources (subpart BBBBBB).
- On June 10, 2022, the EPA proposed revisions to both the major source and area source Gasoline Distribution NESHAP and the Bulk Gasoline Terminals NSPS based on the technology and NSPS reviews.

FOR MORE INFORMATION

- To read the final rule, visit EPA's website.
- This action and other background information are also available at <u>EPA's electronic</u> <u>public docket and comment system</u>, or in hard copy at the EPA Docket Center's Public Reading Room.
 - To read the materials, please use this docket number: Docket ID No. EPA-HQ-OAR-2020-0371.
 - The Public Reading Room is located at EPA Headquarters Library, room number 3334 in the WJC West Building, 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 must show photo 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.