

**FACT SHEET**  
**Final Amendments to Air Toxics Standards for**  
**Coke Ovens Pushing, Quenching, and Battery Stacks; and Coke Oven Batteries**

**ACTION**

- On May 23, 2024, the U.S. Environmental Protection Agency (EPA) finalized amendments to update and strengthen emission standards for hazardous air pollutants (HAP) such as benzene, mercury, lead and arsenic that are emitted by coke oven facilities.
- The final amendments will fulfill EPA's responsibility under the Clean Air Act to periodically review emission standards to reflect developments in pollution control technologies and techniques, and to establish standards for all types of HAP emitted by regulated facilities. The final rules will establish:
  - more protective standards for HAP leaks from doors and other sources at coke oven batteries;
  - a fence-line monitoring requirement to ensure that coke oven batteries regularly monitor benzene levels near the facility and take appropriate corrective action if these levels exceed a particular threshold;
  - opacity limits for bypass and waste heat stacks; and
  - standards for currently unregulated pollutants, such as mercury and non-mercury metals, emitted by coke ovens.
- This final action also fulfills EPA's responsibility under the Clean Air Act to assess the remaining risks due to HAP emissions from certain sources at coke ovens and ensure the standards for these sources provide an ample margin of safety.
- These final amendments will require better monitoring of health-harming pollution, provide more timely information for communities, tighten standards for certain equipment, and improve accountability and compliance assurance at coke oven facilities.

**DETAILS**

- Following a residual risk and technology review for the Coke Ovens Pushing, Quenching, and Battery Stacks (PQBS) NESHAP (subpart CCCCC) conducted in accordance with the Clean Air Act (CAA), EPA is finalizing:
  - Risks due to emissions of HAP from the PQBS source category are acceptable and the current PQBS NESHAP provides an ample margin of safety to protect public health.
  - Eighteen new Maximum Achievable Control Technology (MACT) floor standards that address 25 previously unregulated HAP. The applicable standards vary based on the type of facility.
  - A requirement for bypass and waste heat stacks at heat and/or nonrecovery (HNR) facilities to meet a 20 percent opacity limit.
- Following a technology review for the Coke Ovens Batteries NESHAP (subpart L) conducted in accordance with the Clean Air Act (CAA), EPA is finalizing:

- Lower leak limits for coke oven emissions from coke oven doors, lids, and offtakes as a development in practices, processes, or control technologies that necessitate revision of the standards.
- Requirements for HNR facilities to meet a limit of zero percent leaks from oven doors in addition to either monitor pressure in ovens or common tunnels during all phases of oven operation.
- A revised equation to estimate emissions from leaks from coke oven doors that replaces an equation that used only 1981 data.
- Fenceline monitoring for benzene, including a work practice action level. If a monitor reading exceeds the final action level, the facility must do a root-cause analysis and take corrective action to lower emissions such that fenceline monitor readings are no longer exceeding the action level.
- In addition, the EPA is also finalizing: (1) the removal of exemptions for periods of startup, shutdown, and malfunction to be consistent with recent court decisions and clarifying that the emissions standards apply at all times for both NESHAP; and (2) requirements for electronic reporting of performance test results and compliance reports for both NESHAP.

## **BACKGROUND**

- Coke is used in blast furnaces at iron and steel production facilities (along with iron ore and other ingredients) and at iron and steel foundries in the conversion of iron ore to iron, which can be further refined in other furnaces to produce steel. Coke plants produce coke from coal using coke oven batteries. A battery consists of a group of ovens connected by common walls.
- Coke is produced in one of two processes: (1) by-product recovery (ByP), where chemical by-products are recovered from coke oven emissions (COE) in a co-located coke by-product chemical recovery plant that is not part of the PQBS or Coke Oven Batteries source categories; or (2) HNR, where chemicals are not recovered but heat may be recovered from the exhaust from coke ovens in a HRSG.
- Within eight years of setting the maximum achievable control technology (MACT) standards, section 112(f)(2) of the CAA directs EPA to assess the remaining health risks from each source category to determine whether the standards protect public health with an ample margin of safety and protect against adverse environmental effects.
- Also, at least every eight years after setting MACT standards, section 112(d)(6) of the CAA requires EPA to review and revise the standards, if necessary, to account for improvements in air pollution controls and/or prevention measures.
  - In addition, as an outcome of *Louisiana Environmental Action Network v. EPA*, the EPA has an obligation to establish standards for previously unregulated HAP emissions from a source category when the agency conducts an eight-year technology review required by the Clean Air Act (called the “LEAN Decision”).

## FOR MORE INFORMATION

- Interested parties can download a copy of the final rule notice from EPA's website at the following addresses: <https://www.epa.gov/stationary-sources-air-pollution/coke-ovens-pushing-quenching-and-battery-stacks-national-emission> and <https://www.epa.gov/stationary-sources-air-pollution/coke-ovens-batteries-national-emissions-standards-hazardous-air>
- This action and other background information are also available either 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 Nos. EPA-HQ-OAR-2002-0085 (Coke Ovens: Pushing, Quenching, and Battery Stacks source category) and EPA-HQ-OAR-2003-0051 (Coke Oven Batteries source category).
- For further technical information about the final rules, contact DonnaLee Jones, EPA's Office of Air Quality Planning and Standards (OAQPS), at (919) 541-5251 or [jones.donnalee@epa.gov](mailto:jones.donnalee@epa.gov) or Chuck French, at (919) 541-7912 or [french.chuck@epa.gov](mailto:french.chuck@epa.gov).