FACT SHEET

Proposed Amendments to Air Toxics Standards for Coke Ovens Pushing, Quenching, and Battery Stacks; and Coke Oven Batteries

ACTION

- On July 31, 2023, the U.S. Environmental Protection Agency (EPA) proposed to amend the 2005 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coke Ovens Pushing, Quenching, and Battery Stacks. In addition, the action proposes to update the 2005 NESHAP for Coke Oven Batteries, including a proposed requirement for fenceline monitoring for benzene as well as more protective standards for leaks and new proposed standards for currently unregulated air toxics.
- This proposed action would further reduce emissions of hazardous air pollutants, also known as HAP, and improve accountability and compliance assurance.
- Following a technology review for the Coke Ovens Batteries NESHAP conducted in accordance with the Clean Air Act (CAA), EPA is proposing:
 - Fenceline monitoring for benzene, including a work practice action level. If a monitor reading exceeds the proposed action level (that was determined from EPA's dispersion modeling completed using the current emissions inventory for these facilities), 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.
 - To lower emission 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.
- Following a residual risk and technology review for the Coke Ovens Pushing, Quenching, and Battery Stacks (PQBS) NESHAP conducted in accordance with the Clean Air Act (CAA), EPA is proposing:
 - That risks due to emissions of HAP from the PQBS source category are acceptable and that the current PQBS NESHAP provides an ample margin of safety to protect public health.
 - There are no developments in practices, processes, or control technologies that necessitate revision of the standards under the PQBS NESHAP technology review.
 - New Maximum Achievable Control Technology (MACT) floor standards for 15 previously unregulated HAP from pushing, battery stacks and Heat and Nonrecovery (HNR) facilities main stacks from steam generators (HRSGs).
 - Beyond the floor (BTF) standards for two previously unregulated HAP (particulate matter (PM) metals and mercury) from waste stacks at HNR facilities that do not have HRSGs.
 - For other HNR facilities that have HRSGs, EPA is proposing MACT floor standards for mercury and PM HAP metals from bypass stacks.

- In addition, the EPA is also proposing: (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.
- To inform the development of this proposed rule, the EPA collected a substantial amount of data from the existing facilities, first in 2016 and then again in 2022, including data on current emissions, control technologies, and work practices to minimize emissions.
- Based on data collected, the EPA anticipates that coke oven facilities should be able to comply with the proposed more protective door/offtake/lid standards without additional controls; and all but one facility should be able to meet new mercury and non-mercury metal standards without new controls.
- Regarding cost impacts, we estimate the total capital costs would be \$7.5 million, annualized costs would be \$9.1 million for the industry, and would achieve an estimated 4.1 tons per year (tpy) reduction of HAP metals emissions and 9.1 tpy reduction of fine PM. Approximately half the annual costs are for fenceline monitoring and compliance testing for all facilities, and the other half are for the one facility to add controls for mercury and nonmercury metals.
- We do not expect any significant economic impacts on small businesses. There is only one small business affected by this rule and the estimated costs for that one company are low.
- We are soliciting comments on a number of aspects of this proposed rule, including the estimated costs and reductions.
- EPA will accept comment on the proposed amendments for 45 days after publication in the *Federal Register*.

BACKGROUND

- Coke is used in blast furnaces at iron and steel production facilities (along with iron ore and other ingredients) 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) heat or nonrecovery (HNR), where chemicals are not recovered but heat may be recovered from the exhaust from coke ovens in a heat recovery steam generator (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").

HOW TO COMMENT

- Comments, identified by 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), may be submitted by one of the following methods:
 - Go to <u>https://www.regulations.gov/</u> and follow the online instructions for submitting comments.
 - Send comments by email to: a-and-r-docket@epa.gov, Attention Docket ID Nos. EPA-HQ-OAR-2002-0085 and/or EPA-HQ-OAR-2003-0051.
- Mail your comments to: EPA Docket Center, Environmental Protection Agency, Mail Code: 28221T, 1200 Pennsylvania Ave, NW, Washington, DC 20460, Attention Docket ID No. EPA-HQ-OAR-2018-0794.
- Deliver comments in person to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, DC. Note: In-person deliveries (including courier deliveries) are only accepted during the Docket Center's normal hours of operation. Special arrangements should be made for deliveries of boxed information.

FOR MORE INFORMATION

- Interested parties can download a copy of the proposed rule notice from EPA's website at the following addresses: <u>https://www.epa.gov/stationary-sources-air-pollution/coke-ovenspushing-quenching-and-battery-stacks-national-emission</u> and <u>https://www.epa.gov/stationary-sources-air-pollution/coke-ovens-batteries-nationalemissions-standards-hazardous-air</u>
- 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 proposed 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 proposed rules, contact DonnaLee Jones, EPA's Office of Air Quality Planning and Standards (OAQPS), at (919) 541-5251 or jones.donnalee@epa.gov; or contact Katie Boaggio, at (919) 541-2223 or boaggio.katie@epa.gov.