ENIRONMENTAL PROTECTION AGENCY

40 CFR Part 63


RIN 2060–AU25

National Emission Standards for Hazardous Air Pollutants: Phosphoric Acid Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes an amendment to the national emission standards for hazardous air pollutants (NESHAP) for the Phosphoric Acid Manufacturing source category. The final amendment is in response to a petition for rulemaking on the mercury emission limit for existing phosphate rock calciners that was finalized on August 19, 2015 (‘‘2015 Rule’’). That emission limit was based on the maximum achievable control technology (MACT) floor for existing sources. All six of the existing calciners used to set this MACT floor are located at the PCS Phosphate Company, Inc. (‘‘PCS Phosphate’’) facility in Aurora, North Carolina (‘‘PCS Aurora’’). PCS Phosphate asserted that data received since the rule’s promulgation indicate that the MACT floor did not accurately reflect the average emission limitation achieved by the units used to set the standard. Based on these new data, the U.S. Environmental Protection Agency (EPA) is finalizing a revision of the mercury MACT floor for existing calciners.

DATES: This final rule is effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].
ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2020-0016. All documents in the docket are listed in https://www.regulations.gov/. Although listed, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. With the exception of such material, publicly available docket materials are available electronically through https://www.regulations.gov/. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. For further information on EPA Docket Center services and the current status, please visit us online at https://www.epa.gov/dockets.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Mr. John Feather, Sector Policies and Programs Division (D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–3052; fax number: (919) 541–4991 and email address: feather.john@epa.gov.

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

- BTF: beyond-the-floor
- CAA: Clean Air Act
- CFR: Code of Federal Regulations
- CRA: Congressional Review Act
Background information. On April 7, 2020, the EPA proposed revisions to the Phosphoric Acid Manufacturing NESHAP (85 FR 19412). In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA’s responses to those comments is available in the Summary of Public Comments and Responses for the Phosphoric Acid Manufacturing NESHAP, Docket ID No. EPA-HQ-OAR-2020-0016.

Organization of this document. The information in this preamble is organized as follows:

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I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

<table>
<thead>
<tr>
<th>TABLE 1. NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NESHAP and Source Category</td>
</tr>
<tr>
<td>Phosphoric Acid Manufacturing</td>
</tr>
</tbody>
</table>

\(^1\) North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source category listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding FOR FURTHER INFORMATION CONTACT section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will
post a copy of this final action at: https://www.epa.gov/stationary-sources-air-pollution/phosphate-fertilizer-production-plants-and-phosphoric-acid. Following publication in the Federal Register, the EPA will post the Federal Register version and key technical documents at this same website.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the court) by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. Environmental Protection Agency, Room 3000, WJC South Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person listed in the preceding FOR FURTHER INFORMATION CONTACT section, and the Associate General Counsel for the Air and Radiation Law Office, Office of
II. Background

In the 2015 Rule, the EPA published final amendments to the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production NESHAP (80 FR 50386). As part of that action, we established MACT-based mercury emission limits for new and existing calciners within the Phosphoric Acid Manufacturing source category. These limits were based on emission data from the six identical calciners at the PCS Aurora facility. Because these six sources are of identical design and use the same fuel and feed, we determined that they should be treated as a single source for purposes of MACT floor development. As a result, we combined the emission test results for the different calciners into a single database that we used as the basis to set MACT floor emission limits for both new and existing sources. We also evaluated a beyond-the-floor (BTF) option for MACT for existing calciners but did not select the BTF option as MACT because we determined that the economic impacts to the facility would not be reasonable. We did set a BTF limit for new calciners.

Following promulgation of the 2015 Rule, PCS Phosphate petitioned for reconsideration, pursuant to section 307(d)(7)(B) of the CAA, on October 16, 2015. The EPA granted the petition for reconsideration of the issues presented at the time relating to the compliance schedules, monitoring, and compliance options for air oxidation reactors and scrubbers. This reconsideration was finalized on September 28, 2017 (82 FR 45193). However, subsequent to this petition for reconsideration, compliance testing of the calciners for mercury emissions in 2016 showed that three calciners at the Aurora facility exceeded the MACT limit, with the three other calciners near the limit. For reference, the mean calciner compliance emissions
concentration in 2016 was 0.143 milligrams per dry standard cubic meter (mg/dscm) at 3-percent oxygen, higher than the MACT limit of 0.14 mg/dscm at 3-percent oxygen. The mean of the 2016 compliance emissions concentrations was 44 percent higher than the mean of the data from the 2010 and 2014 Information Collection Requests (ICRs) that were used to develop the 2015 Rule’s emission limit. On May 10, 2016, PCS Phosphate submitted a letter to the EPA requesting a revision to the calciner mercury MACT floor standard. On September 6, 2016, PCS Phosphate added the calciner mercury limit to its earlier petition for reconsideration. This additional request was not raised with reasonable specificity or within 60 days of the publication of the 2015 Rule, so the mercury MACT floor issue was not included in the EPA’s 2017 reconsideration of the 2015 Rule. However, on the basis of the test data presented, the EPA was convinced there was justification to review the mercury calciner limit and include new emissions data in analysis of that limit.

Because of our evaluation of the emission data, as explained in more detail in the proposal and supporting documents (Docket ID No. EPA-HQ-OAR-2020-0016), the EPA proposed to revise the mercury emission standard for existing calciners. We received public comments on the proposed rule amendment from six parties. Copies of all comments submitted are available electronically through the docket. In this document, the EPA is taking final action on this revision as proposed.

III. Summary of the Final Amendments
The EPA is amending 40 CFR part 63, subpart AA. This amendment is in response to a petition for a rulemaking to amend the 2015 Rule’s calciner mercury MACT floor emission limit, submitted by PCS Phosphate to the Agency on September 6, 2016. The petition is available in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0016–0007). The EPA is increasing the MACT floor-based mercury emission limit for existing calciners from 0.14 mg/dscm at 3-percent oxygen to 0.23 mg/dscm at 3-percent oxygen. Table 1 to Subpart AA of Part 63—Existing Source Emission Limits, is reproduced in its entirety at the end of this preamble for the sake of clarity. The EPA is amending only the existing source mercury limit for phosphate rock calciners, along with references to its accompanying compliance date. This amendment does not impact any other aspect of the table or regulatory text. The EPA is not amending the mercury emission limit for new sources.

IV. Summary of Comments and Responses

The following is a summary of the significant comments received on the proposed amendments to mercury emission standards for existing phosphate rock calciners and our responses to these comments.

Comment: Several commenters expressed concern that the EPA did not sufficiently consider the risk effects, particularly related to inhalation, of mercury emissions associated with a less stringent standard, and whether stricter limits may be required.

Response: In its recent decision in *Citizens for Pennsylvania’s Future, et al., v. Wheeler*, 19-cv-02004-VC (N.D. Cal. 2020), the United States District Court for the Northern District of California affirmed that 42 U.S.C. 7412(f)(2)(A) does not impose a mandatory duty for the EPA to revisit risk assessments when we revise technology-based standards. Moreover, in this case a reassessment of the risks was unnecessary given the conservativism in our risk analysis.
completed in 2015. The risk assessment supporting the 2015 Rule ("Residual Risk Assessment for the Phosphate Fertilizer and Phosphoric Acid Source Categories in Support of the July 2015 Risk and Technology Review Final Rule," Docket Item No. EPA-HQ-OAR-2012-0522-0081) evaluated risks due to emissions of hazardous air pollutants (HAP) from calciners, including human health effects from chronic and acute inhalation exposure to mercury emissions. The 2015 Rule’s risk assessment conservatively modeled phosphoric acid calciner mercury emissions of 352 pounds per year (lb/yr), which is considerably greater than the 264 lb/yr that we estimate will be emitted in compliance with the revised mercury emission limit. The calciner mercury emission values used to model risk were overestimates because they were based on inaccurate production values and because of the different test method used to derive the emissions estimates used in the risk assessment. As described in the 2015 Rule’s emission data memorandum ("Emissions Data Used in Residual Risk Modeling: Phosphoric Acid and Phosphate Fertilizer Production Source Categories," Docket Item No. EPA-HQ-OAR-2012-0522-0011), an inaccurate projection was made of calciner emissions based on the annual production value and emissions of the one calciner tested in the 2010 ICR. This overestimate applied to all calciner HAP emissions used for modeling purposes, including mercury values. The BTF memorandum ("Beyond-the-Floor Analysis for Phosphate Rock Calciners at Phosphoric Acid Manufacturing Plants – Final Rule," Docket Item No. EPA-HQ-OAR-2012-0522-0082) further explained that the risk assessment used speciated mercury data obtained from the Ontario-Hydro test method. These data provided information on the relative prevalence of divalent mercury compared to elemental mercury, but also showed higher emissions than those obtained using EPA Method 30B. EPA Method 30B is the method used to determine facility compliance and is the basis of the calciner mercury estimates in this action and the 2015 Rule. We originally calculated
allowable emissions by scaling measured emissions to the permitted design capacity, so increased operational throughputs would not change that evaluation. Using the conservative mercury emission estimates from our 2015 Rule’s risk assessment, we still determined that the risk posed by emissions from the category, including mercury calciner emissions, was acceptable, that the standards provided an ample margin of safety to protect public health, and that no additional standards were necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. These conclusions have not changed.

*Comment:* One commenter stated that the EPA did not evaluate increased emissions of HAP other than mercury, such as lead, and whether calcination of higher mercury materials may affect lead emissions. The commenter feels these data should be included in the risk evaluation.

*Response:* The EPA is unaware of any evidence of a correlation between mercury and lead emissions from sources in this source category. This revision of the mercury emission limit for existing calciners is based on additional data that became available for analysis. Emissions of other HAP, such as lead, will not be changed by this action. No operational changes are expected as a result of this action. As discussed in the previous response, any changes in calciner operations since relevant data were originally gathered do not change the determinations made based on the 2015 Rule’s risk assessment. This action does not affect emission limits for non-mercury HAP surrogates, which remain subject to current compliance requirements and are out of the scope of this action.
Comment: One commenter claimed that test reports for EPA Method 30B data were not available and that this precluded quality assurance or proper evaluation of analyses by the facility or the EPA.

Response: Compliance test reports are publicly available through WebFire (https://cfpub.epa.gov/webfire/). In addition, the mercury compliance test reports, along with the mercury study carried out as part of the consent order, have been added to the docket. We verified that the reported information was the same as that used to calculate the revised MACT floor. These methods and reports have been validated and have undergone quality assurance. Extensive data summaries used by the EPA to analyze the MACT floor were posted in the docket for the proposed rule and were sufficient to allow proper evaluation of relevant analyses.

Comment: One commenter supported the proposed decisions to revise the 2015 calciner mercury MACT floor standard and not pursue a BTF standard. The commenter agreed that the risk assessment shows add-on controls are not required to protect human health or the environment.

Response: We acknowledge the commenter’s support of the EPA’s proposed decisions.

Comment: One commenter asserted that the EPA did not consider mercury control by raw material selection and that the feasibility of determining the spatial variability of mercury concentration in phosphate rock resources has been demonstrated. Another commenter provided information which demonstrates that ore-switching is both technically infeasible and inconsistent with current permit requirements.

Response: The MACT floor for calciners was established pursuant to CAA section 112(d)(3) as the average emission limitation achieved by a single facility that uses a single
source of raw material, which is mined on-site. Once the MACT floor has been established, raw material selection would be a BTF control option, discussed in CAA section 112(d)(2). In this case, raw material selection is not a feasible option to implement, as is supported by statements from another commenter. The EPA’s site visit report for PCS Aurora (Docket Item No. EPA-HQ-OAR-2020-0016-0008) describes that this facility operates by processing phosphate rock that was mined on-site. The facility is constrained by their mining permit to mine certain areas of the phosphate rock in a certain order. In addition, the mining process itself inherently results in the ore being thoroughly mixed. Low-mercury phosphate rock could not be selectively targeted for mining and calciner processing. Material substitution would not be a feasible means to reduce HAP emissions.

V. Summary of Cost, Environmental, and Economic Impacts

Only the PCS Aurora facility and its six calciners are expected to be affected by the change to the existing calciner MACT floor emission limit for mercury finalized in this action. We are revising the MACT floor based on new data from PCS Phosphate for the existing calciners. Since neither this amendment nor the 2015 Rule anticipated a need to install controls, we do not anticipate a change in actual mercury emissions as a result of this action. Currently, we estimate total actual emissions of mercury from all six calciners to be 264 lb/yr, less than the 352 lb/yr conservatively estimated for modeling purposes in the 2015 Rule, so our conclusions related to human health risk are unchanged and we continue to anticipate no adverse environmental impact. The 2015 Rule set a mercury limit of 0.14 mg/dscm at 3-percent oxygen that the existing calciners could not achieve under normal operations. Without this amendment, additional controls such as an activated carbon injection system would be necessary to comply with the 2015 Rule’s standard. The revised standard that does not require installation of those
controls represents a cost-savings for the facility, since those expenditures are no longer expected to be necessary. We estimate that installing new activated carbon injection control equipment to meet the 2015 Rule’s calciner mercury standard would have resulted in a present value cost of approximately $26 million (2017 dollars) discounted at 7 percent to 2019 over a 5-year analytical period. Therefore, this action will result in a total cost savings of $26 million over the analytical period. For more detail, see the economic impact analysis memorandum in the docket, unchanged since the proposal (Docket Item No. EPA-HQ-OAR-2020-0016-0013).

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at https://www.epa.gov/laws-regulations/laws-and-executive-orders.

A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 deregulatory action. Details on the estimated cost savings of this final rule can be found in the EPA’s analysis of the potential costs and benefits associated with this action.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060–0361. With this action, the EPA is finalizing amendments to the 40 CFR part 63, subpart AA, rule language narrowly concerning
the existing calciner mercury MACT floor. Therefore, the EPA believes that there are no changes to the information collection requirements of the 2015 Rule. The information collection estimate of projected cost and hour burden has not been revised due to any impacts from this action.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. The single facility subject to the existing calciner mercury MACT floor requirements of 40 CFR part 63, subpart AA, is not a small entity.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the National Government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This action will not have substantial direct effects on tribal governments, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.
H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This action does not involve technical standards.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The environmental justice finding in the 2015 Rule remains relevant in this action, which is finalizing amendments to the 40 CFR part 63, subpart AA, existing rule language narrowly concerning the calciner mercury MACT floor.

L. Congressional Review Act (CRA)
This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).
List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Andrew Wheeler,

Administrator.
For the reasons set forth in the preamble, the EPA is amending 40 CFR part 63 as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

   Authority: 42 U.S.C. 7401 et seq.

Subpart AA—National Emission Standards for Hazardous Air Pollutants for Phosphoric Acid Manufacturing Plants

2. In §63.602, revise paragraph (a)(2)(ii) to read as follows:

§63.602 Standards and compliance dates.

   (a) * * *

   (2) * * *

   (ii) You must comply with the mercury emission limit specified in Table 1 to this subpart beginning on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

   * * * * *
3. Revise table 1 to subpart AA of part 63 to read as follows:

<table>
<thead>
<tr>
<th>For the following existing sources</th>
<th>You must meet the emission limits for the specified pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total fluorides</strong></td>
<td><strong>Total particulate</strong></td>
</tr>
<tr>
<td>Wet-Process Phosphoric Acid Line</td>
<td>0.020 lb/ton of equivalent P₂O₅ feed.</td>
</tr>
<tr>
<td>Superphosphoric Acid Process Line</td>
<td>0.010 lb/ton of equivalent P₂O₅ feed.</td>
</tr>
<tr>
<td>Superphosphoric Acid Process Line with a Submerged Combustion Process</td>
<td>0.20 lb/ton of equivalent P₂O₅ feed</td>
</tr>
<tr>
<td>Phosphate Rock Dryer</td>
<td>0.2150 lb/ton of phosphate rock feed.</td>
</tr>
<tr>
<td>Phosphate Rock Calciner</td>
<td>9.0E−04 lb/ton of rock feed&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> The existing source compliance data is June 10, 2002, except as noted.

<sup>b</sup> During periods of startup and shutdown, for emission limits stated in terms of pounds of pollutant per ton of feed, you are subject to the work practice standards specified in §63.602(f).

<sup>c</sup> Beginning on August 19, 2018, you must include oxidation reactors in superphosphoric acid process lines when determining compliance with the total fluorides limit.

<sup>d</sup> Compliance date is August 19, 2015.

<sup>e</sup> Compliance date is [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

[FR Doc. 2020-24280 Filed: 11/2/2020 8:45 am; Publication Date: 11/3/2020]